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Ten essays from the Michigan State Leadership Seminars discuss the social imperatives confronting adult education and what the university can do and ought to be doing about them. The impact of the population explosion, urbanization, automation, the knowledge explosion, and the Bomb make it imperative that new concepts of work and leisure be built into the culture. The role of the university in meeting these problems remains a moot question. It seems clear that without tension generated from within and without, the university would lose its intellectuality and relevancy. The limits of involvement of the university are debated but its role should at least be training the intellect, demonstrating the importance of lifelong learning, and being a detached societal critic; and it should avoid the role of a social agency. Within this context careful articulation of the counseling service and a cadre of curriculum specialists seem to offer promise for pushing ahead with an integrated continuing curriculum. (dm)

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NOTES AND ESSAYS ON EDUCATION FOR ADULTS 44

GROWING TIME

Edited by ROGER De CROW

CENTER *for the* **STUDY OF LIBERAL EDUCATION FOR ADULTS**
at Boston University

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Selected Papers from Michigan State Leadership Seminars

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Boston University Press

THE CENTER *for the* STUDY OF LIBERAL EDUCATION FOR ADULTS was established in 1951 by a grant from the Fund for Adult Education to work with universities seeking to initiate or improve programs of liberal education for adults. In 1964 CSLEA affiliated with Boston University. The purpose of the Center is to help American higher education institutions develop greater effectiveness and a deeper sense of responsibility for the liberal education of adults.

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FOREWORD

The Michigan State University Seminars on Leadership in University Adult Education originated in 1958 and have been held annually since.

These Seminars are unique in two respects. They are idea-centered and therefore largely concerned with the fundamental concepts and viewpoints which ultimately determine the substance, character, and direction of university adult education. They are based upon the assumption that the quality and effectiveness of the leadership currently given to university adult education will determine if, and how soon, it will actually achieve its potential importance in our society.

This uniqueness is reflected in the announced objectives of the Seminars, which are three:

> To provide an intensive in-service learning experience for current and potential leaders in university adult education.
>
> To examine the basic concepts which underlie and give impetus to university programs and services to adults.
>
> To provide opportunities for exchange of information about the task of educating adults as part of the total responsibility of the university.

Invitations to participate in a Seminar each year are issued to American and Canadian colleges and universities, emphasizing that it is designed for faculty and staff individuals who have present or potential concerns as administrators and leaders in the tasks of designing, launching, operating and evaluating educational programs for adults. Enrollment is limited to about 50 participants.

The program format is planned as a four-day residential workshop, held in the Kellogg Center for Continuing Education on the campus of Michigan State University, usually in February. The program is somewhat rigorous and demanding of participants. Serving as sources of ideas and viewpoints are a number of prepared addresses by eminent educators and scholars, symposia, and panels of Michigan State University faculty, and Working Papers for each participant. Study-discussion groups led by university and college leaders afford opportunities to assess the ideas and apply them to practical program situations.

The papers comprising this volume were delivered to the seminars at various points in their seven year history. The selecting and editing were done by Roger DeCrow who was a participant and leader in most of the seminars as representative of the Center for the Study of Liberal Education for Adults. Each year the CSLEA has cooperated with Michigan State University, supplying assistance in preparation of the working papers, and sending one or more staff members to serve as study-discussion group leaders and observers.

To John S. Diekhoff we are indebted for the felicitous title of his paper which we adopted to entitle the entire collection. Growing Time we feel catches most aptly the spirit and intention of the seminars. Indeed the seminars are a time of growth for all of us--an interlude form daily chores to increase our awareness and understanding of the issues that will shape our programs during this era of change--which has been called adult education's own Growing Time.

Robert E. Sharer

Director of the Seminars

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INTRODUCTION

I clearly remember each of the six annual Seminars on University Adult Education which I have attended at Michigan State University's handsome Kellogg Center. Though all had a common purpose and theme, each had an atmosphere and style of its own. Some took their tone from one or another of the speakers; some from particular issues; others from the interaction of participants, some of whom, I may say, were vibrant personalities. One year the inclusion of a sizable group from the Cooperative Extension Service led to an examination of the differences (and similarities) between the two arms of university extension more searching than any other I have every heard. Another year Ernest McMahon in his opening speech happened to make a passing reference to political activity on the part of university employees, which sparked off a controversy that raged to the final session despite all efforts of the Seminar staff to stamp it out. It was a pleasure in these residential seminars to see the influence of certain individuals spread throughout the group: the enthusiasm of Duncan Cambell, the incisiveness of Floyd Fisher, the charm and wit of Brother Leo Ryan.

So each seminar was a unique experience, yet in every one the fundamental issues of university adult education were broken open and laid before the participants. We cannot be leaders of adult education unless we understand the great and changing social needs which are the impetus behind all our effort and until we learn how to perceive the effects of these changes and dislocations in the lives of individuals who may become our students. Neither will we be leaders of university adult education unless we understand, respect, and use creatively the powerful resources available to us in the American university. We will certainly not be leaders if we are not skilled technicians of program planning and administration whose every action aims toward a more lively and beneficial interaction between American higher education and a quick-paced, troubled, modern society.

Over the years Seminar participants have approached these great themes from every possible viewpoint in discussion groups mixing seasoned veterans with raw newcomers to the field, Canadians with Americans, people from evening colleges, Cooperative Extension and general extension, from the newest and smallest to the oldest and largest operations in the country. A cadre of discussion leaders, many of whom have served regularly for many years, guide the groups. A distinguished array of guest speakers have fed the discussion with the experience and best thinking of leaders in many fields: science, industry, social philosophy, university administration, adult education, and many others. The presentations have ranged, according to the personality of the speaker, from quiet little chats with the participants to screaming harangues intended to scare hell out of us all and drive us into immediate action.

From these many addresses I have selected a few for this publication which, to some extent at least, fit together under the major themes of the Seminar. Most of them have been abbreviated somewhat, but I hope that the essential argument of each has been left intact. I personally regard one of the essays in this collection as perhaps the most important statement on an adult education problem made anywhere in recent years; another, I feel, is the most trenchant treatment of its subject in the literature, and another is, to my mind, such a delightful and amiable little piece that I hope you all will read it. Many fine things have been omitted in the painful process of selecting a few of the many addresses given at the Seminar. I hope that some of these can one day be published in some other place.

The Michigan State Seminar, now in its eighth year, continues to provide the opportunity for intensive exploration of basic issues in university adult education which is its basic purpose. Past participants also remember the lesser but still important collateral benefits of a good residential educational experience: meeting new friends and colleagues, corridor talk, consultations with experts on the MSU staff, football, barbeques, wonderful jazz concerts, the placid beauty of the Red Cedar room, and many other aspects of conferences planned and executed with faultless precision by the MSU Kellogg Center staff.

Howard Neville, Robert Sharer and their Michigan State colleagues are providing a splendid service to university adult education. My friends at the Center for the Study of Liberal Education for Adults and I intend the publication of this collection of essays from the Seminar as a small tribute to the excellence of their endeavor as well as a means of making some of the content of the Seminars available to a wider audience of adult educators.

Roger De Crow

Part One

SOCIAL IMPERATIVES

Since all change is exciting, but somehow sinister and potentially threatening, to university administrators as well as to anyone else, the overwhelming and accelerating changes in American society outlined by Professor Higman, Milton Stern, and John Diekhoff, lead us often, as Higman notes, into flights from reality or ritualistic mumbling over words (capitalism, free enterprise, monogamy, are some of his examples), which persist and still feel familiar though they have hardly any recognizable referents in the 1960's. Or these changes, especially since they are often so melodramatically symbolized (space flights, factories operating at the behest of machines without a human figure in sight) and instantly communicated, paralyze us into stony inaction.

We are all aware, vaguely and in general at least, of the host of social dislocations erupting around us and are nervously concerned that failure to bring the intellectual resources of the university to bear more quickly and efficiently than we presently do may have increasingly disastrous consequences. To develop some means of translating this troubling awareness into an understanding of how these social changes permeate the lives of individuals, leading them to continuing education, is surely one of the great challenges facing all of adult education. This translation may begin by examining how our own lives have been affected as in John Diekhoff's autobiography of a "formerly educated" man who seems throughout life to be always asking himself the same questions, though all the answers are different at various ages. Or it may begin, Stern suggests, by examining the psychological and attitudinal changes required. What does it mean, *for example, to live,* as we all will and many of us already do, in a physical and psychological "atmosphere of crowd". Or, how will our feelings about education change when "hard work" no longer can serve its soothing function of validating our personal worth?

Higman, Stern and Diekhoff are not only pointing out what they think are the forces molding society, but also calling on us to develop better methods of perceiving the working of these forces in more specific and actionable terms. Some of the papers in other sections of this collection (especially those of Truman White and Malcolm Knowles) make further interesting contributions to discussion of this problem.

REVOLUTIONARY TIDE IN MODERN LIFE

Howard Higman*

For heuristic reasons, I think in terms of emergent evolution--in terms of major breaks in the continuity of man's history. I think in terms of change rather than permanence, of difference rather than sameness. I think in terms of generalizations rather than instances; though I am aware that a case can be made for the opposite approach, I am not able to do it. I see history in terms of four major revolutions; and I believe that you and I live in a time which is either pleasant for us (it is for me) or unpleasant (I think it is unpleasant for Barry Goldwater), because this change is overwhelming and it is not a matter of preference.

The first revolution that I would like to identify occurred 500,000 to a million years ago. And it marks the break between animal and man. We do not have to choose whether we have a materialistic view of life or an idealistic view of life because one can state these things in either set of terms or both, as I propose to do. Materially, that revolution was accomplished by the invention of tools; the missile and the lever. It multiplied hundreds of times the energy which the animal using the missile or the lever could apply against his environment. That defined him materially as a man, not an animal. Ideally, that revolution was the invention of language. Language is not communication. Some subhuman animals have communication, but it is not language. Language involves symbols, abstractions. Dogs cannot make appointments. Language makes institutions possible.

The second major revolution occurred 10,000 years ago on an island between the Tigris and the Euphrates Rivers. We speak of this as marking the distinction between primitive man and civilization. Materially, this may be symbolized by the use of the wheel and the horse or any other animal. In other words, it is the use of biological explosions in the muscles of other animals than man himself. The Syrian with his spear multiplied by hundreds of times the energy he put against his environment over that energy which was employed by primitive man. Ideally (as opposed to materially), the revolution was a revolution in language called writing which made possible history, proselyting, slavery, and class. And we call that civilization.

Then life was essentially constant for 10,000 years until about 400 years ago. Four hundred years ago we again have a revolution equal in magnitude to the two previous ones. In terms of energy, the material revolution consisted in the use of energy other than that in the muscles of animals, i.e., the use of fossil fuel converted into motion other than fossil fuel, such as heat. This, of course, represents what we are familiar with: the steam engine, electric motors, combustion engines of all kinds, the old aeroplane with its gasoline engine. Ideally, this change was a result of the invention of printing. Printing meant the vulgarization of the word and the consequent collapse of the elite, theocratic, power-based society which gave way to a new society. This new one, called capitalism, was based on Puritanism. Puritanism taught us four things: individualism, work, thrift, cleanliness, which is to say, order. Puritanism, termed capitalism, turned out to be predominantly materialistic. By abandoning the Catholic doctrine of community-"Thou art thy brother's keeper," it made possible, by exploitation of most of the brothers, the accumulation of capital, enough for the economy of abundance and professional economists. This in turn, of course, had to destroy the efficacy of the Puritan ethic. Karl Marx persuaded most Americans that the material culture is basic. No group in the world is more economically deterministic than the American decision-makers, whether they be the military or the business man. In the words of Harold Lasswell, "we know that the world is run by force, fraud, and favors." The Air Force, the Voice of America, the Marshall Plan! In the words of American liberal William Graham Sumner, "Self-maintenance mores are basic." Charles and Mary Beard explained how our Constitution was really written. Finally the American sociologist put Karl Marx's theory through the American pragmatic matrix and it came out "cultural lag." This explains, of course, why we are more interested in our school buildings than we are in our school teachers.

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*Howard Higman is Professor of Sociology at the University of Colorado at Boulder

So taking the materialists' point of view for a moment, the fourth great revolution which has occurred marks quite as major a break with the past as have the three before it. From an energy point of view, obviously, the current material revolution is the invention of nuclear energy. The date is 1905, if you think in terms of Einstein. But I think of the date as March 1, 1954. March 1, 1954, is the date on which we detonated a hydrogen bomb in the Pacific with energy the equivalent of 22 million tons of TNT.

The second major material revolution in the immediate environment is mass production. The date is 1912. And the name with which we identify it is Henry Ford and his assembly line. You will recall that when he made the Model T, Henry Ford said, "You may have this car in any color that you want it, provided that it is black." The assembly line did more to destroy capitalism than Karl Marx. The assembly line is destroying the industrial individual, de-skilling the worker, cooperatizing or sovietizing capital, alienating the worker, and collectivizing society. Mass production has destroyed private property, free wage contract labor, the allocation of resources by price mechanism in a free competitive market, and a profit and loss system. Or to be more specific, it has destroyed the loss part of the profit-and-loss system. But most important, mass production has produced a level of living far above subsistence; and it has produced the Konsummen Gesellschaft in the United States and Western Germany, where consumption rather than work is the value, and David Riesman's radar-directed population finds that social acceptance in getting along with others is basic. Motor replaced man's muscles, the assembly line replaced his manual skill, and now automation is about to replace his last remaining role in the productive process--observation, decision, and control. This makes the worker's alienation complete.

The next contemporary American material force I wish to mention is the falling death rate resulting from the elimination of starvation and disease. This is a subject in which there is wide controversy. The Neo-Malthusians, including my much-respected friend Harrison Brown, see population pressure as a danger to peace and well being, unless there is a dramatic drop in the birth rate, especially as effected by birth control. We in America look abroad and see teeming hordes of yellow Asiatics. Vogt and Osburn in This Plundered Planet and The Road to Survival predict doom for us. But this is a very complex argument. For a variety of reasons I predict that the birth rate will not fall with the falling death rate and that the population of the earth will increase again as dramatically as did the European population in the last 200 years. I shall expect one billion Red Chinese within the next generation.

The last force which I will mention is hunger. Hunger is based upon an inadequate application of technology to natural resources. At present it takes about two acres of land to feed one person. The earth surface has some 16 billion acres of arable land. Using old-fashioned protein synthesis machines like cows and pigs, it is possible to produce food for a population on the earth's surface today of 8 billion people. Using new techniques, which our physical scientists have developed (for example, protein from algae), it was calculated by the Planning Division of the University of Chicago with Rex Tugwell and Richard Meier at Michigan that a population could be sustained at the present time at top levels of living on the earth's surface of some 30 billion people--or 36 billion perhaps.

If we can separate the noncontroversial force of hunger and disease from population pressure, I will agree that this is the most violent force in the world in which we live. Hunger is the basis of social unrest. Hunger is a condition existing when an individual is lacking in some one or other of the forty or so foods necessary for health. Two-thirds of the world's population is hungry. Milton Eisenhower has estimated that we need a 110 percent increase in food in the next twenty years. Formosa has a per capita protein intake of 4.7 grams per day--the lowest--and it goes all the way up to 8 in India, 9 in Japan, 61 in the United States, 81 in Sweden. These exactly inversely correlate with the birth rate. Sweden has the lowest at 15 per thousand persons per year and the highest level of living. Formosa has the highest birth rate--45.6--and the lowest level of living.

Next I would mention the falling death rate. I am saying that the death rate will fall before the birth rate does. We will see a vast increase in numbers, but also we will see an aging of the population and the various problems that will come with that.

Turning to the current revolution from the material factors to the ideal ones, if the first revolutions were language, writing, and printing, the current revolution is electronic communication: calculators and television. In one respect electronic communication turns us back to the condition of the primitive. The primitive society was limited by the size of a group that could hear one human voice. In part, the freedom and individualism of the past was based on the simple fact that one did not, because one could not, know what other people were doing or saying. Today it is possible for the entire world to hear one person speak at the same time. Sometimes this phenomenon is called the shrinking world.

Pure reason sees all forces in terms of ideas. And I believe the ideas are religion. Whatever else may be said about Arnold Toynbee, the historian, I believe he is quite right in his claim that all societies are born with a religion or faith, either explicitly, as Western Christian civilization, or implicitly, as is contemporary American civilization. I mean a contemporary American civilization, whose God is efficiency or production, and whose theology is the behaviorial sciences, sociology, Lewin, Freud, the culture concept, public opinion polling. The first book of this theology is cultural relativism. However, controversial the concept may be among anthropologists, the world may never be the same as a result of William Graham Sumner's Folkways, which gave us a relativistic rather than an absolutistic morality. The culture concept replaced the race concept, and it is fundamental to the collapse of the British Empire. Sigmund Freud abolished the dichotomy of child and man, of sick and well, of good and bad in addition to breaking the mind-body dichotomy. The Chicago School of Ecology and Kurt Lewin's Berlin Field theory externalized causation of social behavior, making society responsible, and thus abolished the individual. Public opinion polling and market research have equated desire, however ignorant, with policy. The practical effect of Einstein's relativity etiquette has been to establish that one opinion is as good as another and that students should be asked to write their personal opinions on examinations rather than reveal any internalized information of objective doctrine.

The new religion is Democracy. But by Democracy I do not mean constitutionalism, parliamentary republicanism, or the aristocratic liberal individualism often called Jeffersonian Democracy. This democracy is a vulgar equalitarianism holding to the absolute equality of every individual human being, black, white, yellow, male, female, student, faculty, sick, or well. In individualistic England this democracy is called the welfare state. It has produced the Angry Young Man. In collectivistic and underdeveloped Russia and China it is harsh, as harsh as were our own coercive Puritan forbearers. And like that Christian heresy, Puritanism, it is also a Christian heresy, because it is materialistic and is called Communism. This force in the overdeveloped United States has attacked both the individualism and the coercive character of Puritanism with the friendly benevolence of group dynamics and the corporation man.

Unfortunately, words persist long after the things to which they refer disappear. I wish now to talk about some of those words. I will give you three concrete examples to try to make all of us feel more strongly, because I do not think it is possible to overestimate the change in the world immediately ahead of us. The first word I would say that we still have going in the United States, but only as a word, is capitalism. This is not a capitalistic economy. Yet we persist in talking about it as though it were. And the word remains with us.

Secondly, we have the words private property. And we do not need to go into the fact that private property is no longer private (This fact was well described in a book, The Modern Corporation, by Berle and Means about the early Twenties and Thirties.) But it is not even property anymore. The contemporary American economy is not based upon property at all in any sense that my father or Adam Smith would understand. Private property now is based upon credit. We speak of owning things. We say, "That is my house." Of course, it is not; it has a mortgage. In fact, who owns the mortgage? A banker says that he owns the mortgage, but he does not because someone holds a higher kind of mortgage. This goes on indefinitely. Americans do not own automobiles; they subscribe to them. They pay $87.75 a month or something like that. All the virtues of owning things are gone. I mean the economy obviously would cease instantly if persons were to practice the Puritan virtues of thrift or ownership. Not owning things, or credit, operates at every level. If the non-ownership is very small, you call a man a debtor; if it is very high, you call him a business man. But it is essentially the same thing.

Allocation of resources by a price mechanism in a free competitive market (where a free competitive market is defined as one in which the operation of any individual does not affect the market) does not exist. At least we can say things like this: in the case of

80 percent of all products in the United States, 80 to 90 percent of them in turn are produced by often two, maybe three or four, firms. For instance, 80 percent of the refrigerators are made by General Electric or General Motors. Another similar sort of figure is the fact that half of the manufacturing in the United States has been done by 130 companies since the Thirties. And the number is going to be smaller. So we do not have a condition of many, many small firms. And even if professors of economics persist in inventing new words like "oligopoly," etc., to try to connect the past to the future, it is really a fraudulent effort.

Again, we have the term "free individual wage contract labor." Even the United States Supreme Court knows that it does not exist. The average worker sociologically functions in his union and his job very much the same as he functions with his income tax. He reads in the newspaper what his senator decides about this income tax and reads in the newspapers what his wage rate is going to be. This has been formalized in legal doctrine in the Forties in two very significant decisions from the Supreme Court, the Case case and the Steel case.

The words persist: private enterprise, capitalism, free wage contract labor. The institutions do not. Another word which I do not want to go into at any length is the word monogamy. The word monogamy refers to the idea that married persons will be married to one other individual and that this cannot be dissolved. We have in the United States what might be called serial polygamy. The idea of marriage as a sacrament sociologically does not function in the society in which we live.

Let us take another word, another institution, for just a moment, family. The family consists now of a man and a woman and children between the ages of zero and seventeen. In the first place there are no children aged thirty in a contemporary American family. We may speak of them as that, but they actually are not around. I mean, if you have children who are thirty and you are in Schenectady, then they are in California; and if you are in California, they are in Schenectady. Modern little children do not have cousins. They do not have aunts or uncles in the sense of the figures which they can read about in the literature of one generation ago. By and large, they do not have grandmothers and grandfathers in a functional sense, functioning for them. They hear of them, maybe. When they are young, they are in a different town; and when they are old, they are in a nursing home. So the American child does not see anyone who is senile or dying. With reference to children we speak of our society becoming middle class. There is a sense in which in many ways so-called middle class children in America are becoming like lower class children of a generation ago. The modern middle class child has much the same social functions that only peasants had. In other words, in 1860, the only human beings who at the age of twelve were economically independent and who made decisions on their own were lower class children. Little uneducated, low-income boys from Leiskard, England, at the age of ten or twelve might go to the pit or travel or determine their own futures. This economic freedom has become characteristic of middle class children in our society. They are coming to have a large body of income, sufficiently large that it is directing Madison Avenue to turn its attention in advertising to children's desires, to children as decisionmakers. And they are peer oriented. By that, I simply mean that the typical American teenager does not regard his mother and father as authorities. You may persist in the myth that yours regard you as one. But if you do, they have simply succeeded in hoodwinking you. They do not. They know the truth is not to be found in anyone over two years older than they. They have their own source of authentication. There is also a sense in which the contemporary child is adult at twelve. At least there is no role for the child between twelve and the eighteen years old. There is the child up to the age of eleven or twelve and then suddenly there is a conflict situation and adulthood of one sort or other. We have the persistence of the idea of a debutant. Now remember what debutant meant. Those parties in St. Louis were called "coming out parties." What eighteen or twenty-year-old girl now could be introduced to anybody in St. Louis? She obviously met them all at twelve. A contemporary American child is a migrant. He moves, in historical terms, vast distances in space; he is not normally in an environment in which he has any past.

This leads us to the fifth point I'll make which is the breakdown in the rural-urban dichotomy. We used to have cities, and we had country. We had life in the city, and we had life in the country. The thing that is going up is neither city nor country. It has the characteristics of neither of them. We anticipate in another ten or fifteen years a continuous suburbia or whatever--a "rurban" housing sort of thing--from Boston all the way down to Norfolk, Virginia, without any visible distinction between country and town. And this area will be occupied by people who were not there last year and who will not be there next year. Something like one fifth of the citizens of Denver today were not there a year ago. A fifth of them will not be there next year. So we have a new kind of absence of roots which means a totally different sort of world.

I want to mention, too, the problems that arise with the destruction of the clearness of the male-female roles. The proof of the absence of the female role is the loss of the double standard. The words in religion have persisted but the institutions have not. Historically, clergymen, priests, ministers were community authorities. They were moral consciences. They found it possible to issue edicts concerning what constituted correct or incorrect behavior. This role for the private, contemporary clergyman is all but gone. He is a baby-sitter, a psychiatrist, a counsellor. An analysis of titles and contents of sermons in American churches today show the total loss of theological content. The typical church does not concern itself with what in Europe or in the past century we would have called theology, with sin, salvation, and life. We have sermons on how to be nice, how to be friendly, how to be healthy, and practical questions like that. We have community churches in which the only criterion for membership is that you are nice to everybody else or that you must smile. Anything beyond that is your own private affair. That is not the traditional function of religion.

I think that it is particularly hard for you and for me to see these changes, because we have a way of being able to devise a world sort of like the one that we used to know. We feel more comfortable in it. In other words in the face of this really revolutionary world some of us have sought refuge in what modern psychologists call "delusions." Dr. Jerome Frank, psychiatrist, said that if men act in the way that contemporary governments and nations have been acting in the arms race, they are called "sick." No greater example of delusion exists than the last ten years' flight in the United States into unreality: Senator Joseph McCarthy's search for essentially nonexistent American Communists, the classification and the super-classification of our non-secrets, and loyalty oaths and purges.

Now I will finish these remarks with a quotation from Quincy Wright, who I think is remarkable to have written these words in 1938 or 1939. They were published in 1942 by the University of Chicago Press in a book called The Study of War. Wright came to these conclusions by logic and analysis, before the UN or atomic energy, before intercontinental ballistic missiles, or the power structure of the world in which we live was here, and before World War II was written into history. Quoting now, "If peace is to be achieved, the ideal should be conceived not as a grouping of favorable persons from which the unfavorable should be expelled but as a reorganization of all persons and groups. Unfavorable persons should be treated not as evil but as a consequence of an inadequate organization for all. Thus the community of nations must be built by continuous development of the principles, institutions, and laws of the world as a whole and not by an organization of the angels with the hope of ignoring, excluding, converting, or destroying the devils."

NEANDERTHAL SPACEMAN

Milton R. Stern*

A major characteristic of the problems of our time--the overpowering ones of war and peace, of the changing nature of work and leisure because of automation, of the population explosion and crowded cities, of the destruction of earth's surface--is that, when confronted full face without mirrors, they seem, like the Medusa, often to turn us to stone. They conduce to a feeling of helplessness. Without a doubt an outstanding effect of these changes in living today is the diminishment of the individual in his own eye as a person functioning capably in society.

This attitude persists if the individual deals with these problems only on the scale upon which they confront mankind entire--the world. Can they be reduced to human size? This is a major imaginative task of education.

Perhaps the habit of "thinking big"--and being immobilized by it all--is an attitude limited to thinkers, the curse of the intellectual if you will. But I doubt it: apathy and anomie, the paralysis of will and spirit, are too pervasive at too many levels of society today. On the other hand, I am not so pessimistic myself and I doubt that most of you are, because as administrators in our field, we live a busy daily life on a human scale as well as a cosmic one. This experience is corrective and, at least intermittently, promotes optimism.

What are some of the effects in the lives of the people we deal with in our classes of the several phenomena mentioned a moment ago: the Bomb, Automation (as stage two in the industrial revolution), the Population Explosion? These are the three major headings I have chosen to identify. There are other ways of classification and other headings, but they all result from the science and technology of the last 300 years. So it is accurate to say that science is a major impelling force leading to the social changes taking place now in our own country, in Europe, and the Soviet Union, and in the rest of the world, developed and undeveloped. Of course, the changes are not uniform in pace and are significantly different in kind because of already existing social variations. But it is important for our activity in adult education that we bear in mind that science dominates the cultural atmosphere of our time.

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I have felt constrained to call this talk "The Neanderthal Spaceman." This may need a bit of explaining. I was trying to express in a phrase both how far we have come as human beings--and how far we have not. Just last month, the National Academy of Sciences issued a report affirming that the space sciences were of overwhelming importance. "What is at stake," the report claimed, "is the chance to gain a new perspective on man's place in nature, a new level of discussion on the meaning and nature of life."

The statement expressed the possibility that there was life on other planets. Probes of various kinds should be tried, and an early attempt should be made to search for life on Mars which, in the words of the report, "should become an ecological preserve."

Should it indeed?

One does not have to be a science fiction fan to imagine sentient beings in the universe who, if they smile, might smile at that. Such beings might regard our planet Earth, third planet of a middle-sized star, as their ecological preserve. Who knows? With radiant space probes of their own, they may have already tagged us human beings like salmon to discover our spawning habits. Whatever such beings may think of us, we might, with some humility, consider ourselves to be Neanderthal Spacemen. After all, the Age of Science and Technology that has precipitated the social changes we must consider has not yet helped us to develop psychological resources to match the hardware. As to moral resources, do not these need more searching out in up-to-date parable and example? The Golden Rule remains valid, of course, but is it really enough to be able to pick up a telephone and "Dial-a-Prayer" as we dial for the weather, G-O-D 1212?

Before leaving the big picture, I must add another quotation and my comment. It is from a talk given at an Arden House Conference in 1960 by Dr. Bernard J. Muller-Thym of the Massachusetts Institute of Technology.[1] Said he:

"We are living at the end of the Neolithic Age. The changes taking place in the world today are not merely changes from one form of society, one form of technology, to another. They are so wide-sweeping that they are taking us from one major epoch of human history into another." That was his opening, and he ended his talk thus: "This is an order of change which is completely different from anything our ancestors ever knew--unless we go back about 10,000 years, when men invented property, when they invented ownership, when they invented work, and mechanics based on the wheel."

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[1] "Cultural and Social Changes," The Changing American Population, pp. 85-96, the Institute of Life Insurance, 488 Madison Avenue, New York 22, New York.

Doesn't this shed light on our discussion? It is a way of looking at our theme which goes past questions of nation, income, race, of a mechanized industry called farming, of towered cities where traffic stands still--of the limited-time view of the last crowded three hundred years of the Age of Science. After all, the 21st Century is only half-a-lifetime away, and to think of ourselves at a major turning--or leaping--point in man's struggle, gives a perspective that is at once reassuring and demanding, even dizzying. In such an age of transition, we who are the men of the period may have less awareness of what is happening than will the historians of the future.

But we are the men they must write about. What we do or fail to do counts. We are the generations in command now, and upon our self-knowledge and bootstrap sense of human destiny will depend, we may be sure, whether there will be human historians in that future. To be sure the race does not live suspended between past and future but keeps going, whether on a tightrope across an abyss or on more solid ground. All periods are periods of transition, but our century may well be more important by virtue of choices we make than, say, the 14th Century.

I have made the point that social change today is largely brought about by science and technology. I say "today" and "largely" because there are, of course, other things that can bring about social change, including a violent reaction to single-minded technology. We tend to have such scientific tunnel vision these days as to be unaware of the effects of other forces. A new Ice Age, for example, which according to the latest judgment (scientific, to be sure) will be upon us in full force within the next 10,000 years would change social conditions.

Just as drastic changes in health and a longer life span have been brought about by modern medicine, so in the past have drastic social changes been brought about by epidemic. The Plague, the Black Death of the 14th century, had significant effects as it wiped out in some parts of Europe, two-thirds or three-quarters of the population, creating that hysterical attitude typified in the Dance of Death; and incidentally creating the original escape literature in the Decameron of Boccacio, who recounted tales told by people who had fled to the hills from plague-ridden Florence. For more than two centuries in England after the Black Death hit so hard in the horrible year 1349, the lot of labor improved mightily because it was in such short supply. One could speculate perhaps that the growth of the independent spirit that came to such magnificent flower in the time of Elizabeth the First, and claimed as a continuing part of the Anglo-Saxon heritage, came about in part as a result of the disaster of the Black Death.

Earthquakes, too, can change a society--or wipe it out. We must not, I am saying, think only in terms of technologically induced changes in society. In fact, these can be more manageable than others which really must be lived with, endured, because nothing can be done about them. It is ironical in an age which prides--even preens--itself on the rationality of scientific choices, that human beings, habituated to the past, think in terms of the inevitability of events. True, it is no longer said so often that "you can't stop progress." What seems to have taken its place is, "you can't stop, period." And there are details of private life which influence people, too. We speak, for example, of the millions of pounds of thrust achieved to launch a rocket to the moon or orbit an astronaut, but I lack enough thrust personally to launch my 45 year-old body off the floor for more than a dozen pushups. I find this cautionary. The bodily changes of one lifetime have a dominating influence on our view of the changes taking place around us.

What are some of the ways in which technology--using science, that is--has affected the intimate, personal lives of people?

Let us make an obvious point--so obvious as to be overlooked or perverted in the gloom-and-doom school of contemporary commentary. In the light of history, ours is an affluent society. Although 38 million people in America live in poverty, are ill-fed, ill-housed, ill-educated, starvation is not as likely as has been the case before in history. Gerard Piel has an illuminating point to make: "...the agriculture of industrial civilization...most clearly exposes the nature of the change technology has brought...in contrast with agricultural civilization, where 80 percent of the people continue to be employed or under-employed on the land, less than 10 per cent of the American labor force work on the farm. Working fewer acres each year, they produce still bigger yields: presently enough to feed 12,000 calories to each American every day--enough to feed a billion people an adequate daily ration."

He goes on to say: "The American economy upgrades these calories, via animals, to give a high fat and protein content to our 2,500-to-3,000 calorie daily ration. It also wastes a good deal of food and gives a good deal of it away, and still it has a surplus to keep compulsively in storage."[2] End of quote.

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[2] Piel, Gerard, "Technology and Democratic Institutions." Paper delivered at the 10th Anniversary Convocation of the Fund for the Republic, January 21-22, 1963, New York.

To be sure, this compulsion is the result of 7000 lean years. But the Chinese and Indians are not yet so well off. Millions of people still do starve in our world. Malnutrition is the rule, not the exception. Ours is a rich country, we know, and so are the Western European countries, and in contrast to the underdeveloped countries so are the countries of the Soviet sphere in Eastern Europe. How mixed a world we have! How this shows that distribution is the basic problem of the emerging economy of abundance.

In the rich countries--particularly the richest--the abundance does not stop us from complaining or being anxious. Perhaps this, too, is a biological or cultural legacy from earlier history and prehistory. In our country, poverty assumes a different guise. It is the habit of most Americans to think of themselves as deprived. A standard expression of many, of whatever income level, is to say wistfully, "Gee, what I couldn't do with another fifty, - hundred - thousand dollars."

I've thought so myself. ...And then you get it... and as a friend of mine sardonically remarked on such an occasion, "It takes a long time to get used to an increase in income. It takes a whole weekend."

What may be significant for us in adult education to consider is that a great majority of our compatriots have a common feeling of malaise and purposelessness as a result of an industrialized mass society. The late Dean Inge, the gloomy Dean of St. Paul's, once said, "God does not always punish a nation by sending it adversity. More often He gives the oppressors their hearts' desire, and sends leanness withal into their soul." In the case of our country we may discount distinctions of oppressors and oppressed. All have been stricken more or less by this spiritual and psychological malnutrition.

Are we to think the effects of social change can ever and only be for the worse in the lives of people? I am sure it can't be so. Still I am reminded of Orwell's ironic essay title for a memoir of his boyhood--"Such, Such Were the Joys." And what is to the point is that the mode of expression general to our sociologists, publicists, and most of the rest of us is anxiety. Perhaps there is some remnant of ancient magic in this or fear of a Puritan God. --"Don't strike me down, Lord, I am not having a good time."

But human beings do think, do imagine, particularly when they have the time to do so. We are able to look over the rim of the future these days not be examining entrails but with the help of computers. What we see is scary enough, but by taking thought, we hope we can avoid the disaster that looms. Perhaps anxiety is not always a bad thing, particularly if we relabel it and call it "concern" or "foresight." So let us go into some more of the facts and conclusions of the experts.

Population. The population of the world is now at about three billion, one hundred million. So far as population goes, the most serious influence on the lives of adults is--children. Nearly one-half of earth's people today are under twenty years of age. Three babies are born every second, just over a quarter of a million per day. With the declining death rate, the race is increasing so fast that by the year 2000, we may expect the global total to be over six billion. At the next census in 1970 our own country will have doubled its population in fifty years, without immigration.

The growth rate has created the irony of increased poverty in underdeveloped countries while their production rate has also improved--but not enough. President Nasser feels it is the duty of his Egyptian government to inform the Fellahin about birth control. Red China, in the past year, has reversed its apparent "we'll-out-breed-them" attitude and is now trying to enforce limitations. Famine, no doubt, will assist the process. On the hopeful side, Japan, once a serious victim of population increase, legalized abortion in 1948. There are now estimated to be one million abortions a year in Japan, and its population growth rate has declined.

Still, it must be pointed out that the Japanese rate is not in absolute decline, that more people are being born than die, and we may expect in crowded cities like Tokyo emergence of the condition observed recently in the Philadelphia Zoo. There, animals multiplied, and then they died from being overcrowded. Is it possible that a similar disease we might label "urbanitis" will be a fatal psychosomatic illness of our crowded human cities? Or will we imitate the lemmings of Norway?

What are the chances that "education," that magic pill always recommended for everything by everybody but educators, will help alleviate the population explosion? Probably the situation will have to get worse before it gets better. We know the limitations of education. In India only one-half of one percent of the population has even heard of birth control. The cultural heritage of most peoples is not geared to reduced families. We probably can't reverse tens of thousands of years of human experience in the next generation. But with the rapidity of social change that we have seen in the past fifty years, we may hope, at least, that we can stabilize or regulate population during the 21st century. It will have to involve that activity which is still anathema to conservative editorialists in our country, PLANNING. And world-wide planning at that. Modern public health measures have wiped out malaria, but we have replaced the moquitoes with people...Perhaps we should make Earth, rather than Mars, an ecological preserve in the interest of humanity.

In any event we may expect our own generation of adults and at least the next three or four to live in a physical and psychological atmosphere of crowd. Will privacy be valued more than it has been? Will there be compulsory mass migration to the tundra of the Canadian Northwest, to the inland plateaux of Brazil or to the moons of Jupiter? Will the adult student of the future have started work at 30 and be reitred at 38? For we have shortened adult life at its beginning as we have prolonged its close. These days a man or woman in the twenties is consistently thought of as a "boy" or "girl"; they are still adolescents in the cultural terms of a society that is desperately trying to live by the code of work that it has inherited and is trying to keep as many as possible out of the labor market.

This point brings us readily enough to the next major heading we must consider--the effects of Automation. Let us look no further ahead than the next ten years and troubles loom. I need not hover over the well-worn statistics of alarm more than briefly. President Kennedy said a year ago: "...We have to find over a ten year period 25,000 new jobs every week (that is 13 million new jobs in a decade) to take care of those who are displaced by machines and those who are coming into the labor market...I regard it," he said, "as the major domestic challenge of the Sixties--to maintain full employment at a time when automation is replacing men."[3]

Well, we do not have full employment and we're not likely to get it soon. The President's estimate has been thought by some observers to be minimal. It may be that as managerial and professional members of the working force, we here in this room tend to be insulated from a full realization of the consequences of automation. At least for now, we do not foresee that we will be replaced. In this we may be wrong. Surely, unless we make ourselves expert in the ramified field of automation, we will become superfluous as educators. By expert I do not mean that we need to explore the technology of computers in depth, but we do need to keep ahead in anticipating the social consequences. If we want to keep our jobs, we had better do our jobs, do the adult learning we must do if we are to organize the continuing education of so many millions of people in this ironic crisis of abundance. We have time only to explore a few of the intriguing and demanding issues, but I would suppose that we will be concerned with them and the many others like them as the major preoccupation of the rest of our professional lives.

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[3] Press Conference, February 14, 1962. New York Times, February 15.

Here is a thought to keep with you: "...the American Telephone and Telegraph Company...expects its 1970 revenue from long-distance communications between machines to exceed its revenue from city-to-city telephone calls placed by humans."[4] That is seven years from now. And remember, please, that even the telephone is not face-to-face communication. It has existed for less than one hundred years. "What hath God wrought?"

Another thought: It is only a half-dozen years since the number of white collar workers in our country has exceeded blue collar workers. Yet, we remain guided in our habitual frame of reference, even in our psychology, most of us, by the Puritan notion that work with one's hands is the only work there is. And while we are way back there in our emotional responses, automation has not only moved into offices, but has already brought about large-scale cuts in white collar staffs, including middle management. So, jobs are being wiped out before they are even thought of as being work. We face the need to reformulate and build into the culture new concepts of work and leisure. Consider these observations from French sociologist, Georges Friedman: "...in certain automated jobs inspection duties take approximately 39 to 40 hours a week, while only one hour is required for activities involving physical responses, signals, such as recording readings on a chart, using handgears, buttons or pedals, or taking calls by intercom or telephone. Some word other than 'worker' will be necessary to avoid confusing the duties and responsibilities of such automatic operations with the performance of workers in the past."[5]

An Englishman, R. F. W. Crossman responds by offering a French-derived adjective--"polyvalent." He speaks of the "polyvalent craftsmen needed by the new technological age in which the man must have and successfully blend the attributes of more than one conventional skill."[6] So the workman of the future must have what amounts to an executive capacity for making decisions and the executive habit (would that more executives had it) of quick thinking.

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[4] Diebold, John, "The Application of Information Technology," Annals of the American Academy of Political and Social Sciences, March, 1962, p. 39.

[5] Friedman, Georges, "Leisure in an Automated World," Nation, September 1, 1962.

[6] Crossman, R. F. W., Automation and Skill, Her Majesty's Stationery Office, London, 1960.

Of course we will need a new word, or new words, for "work." Or maybe eventually top management will have the only rare kind of work left, and we will need a new word for the rest of humanity, a word without the overtones of "unemployed." For what is becoming obvious in the combination of growth of population and increased sophistication of machines is that we must focus on what we presently call leisure rather than on work as the major source of meaning in life. This is a cliche, I know, but a difficult one to get under and give new force so that we can continue to keep it in mind as of first importance in continuing education. We may anticipate a longdrawn debate about the value of work in the traditional meaning of the term, "productive work", or as Paul Goodman would have it, "man's work." This is an important debate and too much of it will take place in the rarefied atmosphere of Akademeia. Meantime back on the ranch, the farm, in the factory and office, people will be finding ever less meaning in their jobs, and will be losing them.

Let me quote an automated automobile worker still on the job to give you a sense of how fast we are moving. Said he, "... [I don't like] the lack of feeling responsible for your work. The feeling that you're turning out more work but knowing it's not really yours and not as good as you could make it if you had control of the machine like before." [7]

"If you had control of the machine like before."... How short a time ago similar words were the typical observation by and about workers dealing with machines, any machines. Then it was the machine itself that destroyed individuality and that sturdy sense of craftsmanship that came, for instance, from making an entire pair of shoes yourself with hand tools. Man has been a toolmaker for from 50,000 to 250,000 years--choose your own paleontologist. But in less than 300 years of using science--less than 150 years since the creation of the factory system--we now hark back to a time when the assembly line was manned by human beings!

Such will be the working force of the brave new world. A high order of adaptability to change will be required of men and women trained to manual jobs as well as those with intellectually oriented activities.

As for immediate implications for adult education, it is depressingly clear that simple-minded stereotypes like "retraining of older workers" just will not do. We have to be sure of what they are being retrained for. We may expect in the universities that we will have a continuing clientele of advanced adult students in engineering and the sciences who will have the absolute necessity to be students to keep their jobs. This group will increase--at least for a while. Will they become steadily more isolated from managerial personnel or will they become interchangeable with them? Managers, too, will have to come to school even more than they now do, as their jobs change even more than they have already. Will there be a shifting emphasis in their study of the humanities? Or will not they pay attention? Will the already noticeable separation of this new working class from the emerging leisure masses be increased? What will the class structure be a generation hence?

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[7] Faunce, William A., "Automation and the Automobile Worker", Social Problems, Vol. 6, Summer, 1958, pp. 68-78.

I have used the phrase, "working class," about the hypothetical elite group, and "leisure masses" about the rest only half-ironically. I have used them in the absence of a new terminology. Who knows what words will be invented? "Automation" itself is a word that, so far as I know, has come along only in the past dozen years or so.

What adults may expect--at least a few of the things for most of them--are shorter hours, a shorter working life, earlier enforced retirement, a longer life to be retired into, even less possibility than now to express personality in their work, but more available ways to satisfy material wants, more goods, and more services--a consuming society, in short, in which thrift, for example, is meaningless, if not positively antisocial. There will be more security, food, and minimum shelter--the welfare state. It has, after all, taken us only one generation to get used to the idea of social security.

The uneasy questions of what will happen to democracy, to individuality, keep rising to the surface, and the answers are not all clear. The conservative and liberal points of view in our country have become blurred and sometimes seem to have exchanged places entirely. There are no easy answers given for tomorrow's problems, only an amplified rhetoric echoing from yesterday. This is true of other countries as well. The Labor Party of Britain, for example, is going through a crisis of policy, but so are the Tories, just as are all established and vested political groups. So is the international Communist movement. We do not know what to think, in fact, as we face a world so vastly different from the political, economic, and social absolutes we were taught a generation ago. Sometimes, as I think of the gap between my childhood and my middle-age, I feel that I was born in the backwash of the 19th century, I am living in the 21st, and that the 20th century never existed.

So far I have dealt with some of the implications of the population explosion and of automation. Before offering some concluding remarks, I must mention a third major heading--The Bomb. It can be brief because the effect of the Bomb is simple. It is fear. Other potentialities for good or ill of nuclear energy are of a piece with the result of other general technological advances. But the image that people hold is of a mushroom-shaped cloud and the prospect they anticipate is extinction.

The effect of fear varies in peoples' daily life. At different times there are different responses--hysteria, wringing of hands, anger, calm resolution. Fear has been man's companion since the birth of the race. In the fact of The Bomb, many simply deny the possibility, and only look at it quickly from behind clasped hands at moments of crisis such as Cuba. A few--too few in my opinion--consistently and outspokenly oppose nuclear testing and campaign against nuclear warfare. To these, ours is not so much an age of science as it is an "age of overkill". Most people, though, till their own gardens, most of the time. The effect on the next generation of adult students in our classes will most likely be different from the present: It has been 18 years since Hiroshima, and a generation has grown up that has had school drills and been exposed to the remorseless radiation of mass communication news on television and radio, and has had no previous Bombless experience. I find it difficult to anticipate what the responses may be--probably as varied as our own.

I suppose that the reaction to The Bomb is like the reaction to the Black Death 500 years ago. The Black Death went away. Or did public health measures have something to do with it? And now? Albert Einstein said, "The Bomb has changed everything but thinking." Perhaps in that line is our cue to make even so menacing a presence less so. Steps leading to disarmament, a not impossible dream, will be probable only if people are able to lead a daily life with some hope. Do I sentimentalize if I suggest that when people look past an immediate terror and think of what the future might be, they help to bring it about via a self-fulfilling prophecy? Of course they need leadership, not only in politics and public affairs, but in education. One of my distinguished colleagues at New York University, when it was suggested to him that adults came to school out of loneliness and frustration, demurred. "They're not lonely hearts, but lonely minds; and if lonely minds seek companionship, then that is a healthy and life-asserting activity." There are many possible responses to fear, and to try to live a full life is the best one. We may be sure that in the future, an important part of the full life will lie with programs like ours in universities.

We must develop new ways to think about our curricula to match the changes in society. We need not only new courses and new programs, but we must attempt to think and feel our way to break through to new conceptions. I know this sounds vague, and I cannot foresee too many of the implications of my observation and I am not sure I like all that I dimly see. Let me put it this way: changes in technology have brought about and will continue to bring about changes in peoples' lives. If we do not anticipate and make choices in our curriculum building, them we will be far behind our students' range of feeling, values, and the new roles they will play. We will be lead by the forces we should help shape, or if you have a philosophical objection to that role for education, at least explain to people.

For instance, it is a commonplace that the sciences themselves have changed shape, that they are all broken up into specializations unheard of a generation ago. The idea of an interdisciplinary study connotes an orderly range of disciplines which are relating to each other. But today in the sciences with the changes that are taking place, what kind of explanations shall we make in our classes? How shall we name courses? Is Biology 1 still the root of biology--or has biology itself changed into something richer and stronger? Is it still biology that we should teach? Or bio-chemistry? Or what? I have a friend who is researching the botany of Mars--space-biology or bio-physics. Is it even the enveloping Natural Sciences that are in order? Or take a subject that we have all found interesting to people in non-credit instruction--religion. What should be the approach of a course in Religion for the Space Age? What about the liberal arts? Is it unrealistic of us to think in terms of such a category as literature? Should we not deliberately invent new formulas, not only of cross-disciplined courses, but of new framework, of instruction altogether? My ninth grade daughter reads The Lord of the Flies--where I read Ivanhoe. Is this merely symptomatic of a difference in generations? Or does it go deeper? I think it does.

What are the well-springs of invention upon which we may draw? Let me mention two sources. First, as is implicit in what has been said, we need to have an empathic attitude toward the lives of our students and a creative attitude toward human possibility as well as an understanding of problems. Parenthetically let me say that the idea of a problem-centered curriculum is a distraction. Urban sprawl, increased juvenile crime, race bitterness--these are social problems that must be dealt with as important subject matter, but they are not the basis for curriculum. People sometimes study to solve problems, but they study subjects, not problems. A course about the City, for example, may be more fruitful than one on Problems of Urbanization.

A second source: If science offers the shaping ground of the future, perhaps art can provide a better vision of that future. Does this sound "way out?" Let me be metaphoric and even more extreme. Contemporary literature and the plastic arts in particular can give us more than enjoyment; they can serve as peepholes through which the light of the future shines and casts images on our classroom walls. We, as well as our students, should look at those pictures. Sometimes we will want to change the now, so that haply we may change the future. But we should look.

Let us finally look past the transitional period of now and the immediate future to ask optimistically what adult education may be like in a hundred years. Values will have changed--particularly of work and leisure. But we may surmise that a most significant change for us will be a change in the attitude toward time. A society of abundance which has conquered the problem of distribution of goods may well think in terms not of "disposable income" but of "disposable time." Because the valuable commodity, then, will be time. Such a society may come to think with Henry Thoreau that "...the cost of a thing is the amount of what I will call life, which is required to be exchanged for it, immediately or in the long run."

How will people choose to use their time? Will they choose us? This depends on what we do now to put our own house in order. If we are coming to the end of the Neolithic Age, then we are at the beginning of a new age for adult education, the age of the Learning Society.

GROWING TIME

John S. Diekhoff*

The title of my remarks is "Growing Time," but the assigned subject, is "The effects of changes in society on the values, roles, and lives of adults." This change does not ask much. Anyone can do it who is expert in anthropology, sociology, economics, philosophy, psychology, political science, and theology - if he knows enough about physics, chemistry, astronomy, and biology and their related applied sciences to understand the present state of those sciences and if he has the gift of prophecy and can foretell their probable future impact on our economy, on our polity, and on our lives as individuals. Of course we must make the application to education as well, but everyone is expert in education. So I approach the task with confidence.

As a matter of fact, I propose to broaden the subject. Educators should not restrict their interest to what we loosely call "social change" alone. They must be aware that the world changes, to be sure; but they should also be aware that our knowledge of the world changes and that people change. By people, I mean individuals as well as groups.

People change. This does not mean other people only; it means you and me and our students. And not all change is for the better. I could illustrate from the life of anyone here, if I knew you well enough. Not to be offensive, let me use a little autobiography.

When I was a young man in college, I was secretary of a political club, a member of a debating society, a faculty-student monthly discussion group, and a social fraternity. I was wildly excited about the Tennessee "monkey trial," which was the great intellectual event of my college days, an event which gave special interest to courses in biology to which it led me. When I saw Inherit the Wind on Broadway seven or eight years ago, I found myself reading Rachel Carson and more recently Loren Eisele's The Immense Journey and The Age of Darwin. A faded intellectual experience of my youth came back. In my youth I had intellectual experiences.

I was excited about ideas. I wrote book reviews for a campus magazine and reviews of sermons for a campus weekly paper - reviews of sermons that were a source of considerable embarrassment to my father, who was a member of the faculty and an acquaintance of the clergymen whose sermons I reviewed and to whom, as an omniscient nineteen-year-old, I was immensely condescending and superior.

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During the first few years that I was out of college, I continued to read the current books and the literary magazines. I had a lively interest in politics - I cast my first vote for Al Smith in 1928 and in 1932 I was a Democratic precinct committeeman in a staunchly Republican community. I took part in amateur dramatics. I played chess and bridge and golf, belonged to a bowling team, and spent an hour a day in the college library looking through current newspapers and magazines. In short, when I was a student and for a few years afterwards, I gave promise of being a reasonably civilized human being.

Now look at me. I pay dues to more organizations than I belonged to then, but they are mostly professional organizations to which I belong for professional reasons. I play apologetic bridge at faculty parties three times a year. I make solemn speeches like this at educational conferences like this. Since 1936 I have calmly voted a straight Republican ticket. I read professional journals, mystery stories, and mimeographed staff reports. I know only the names of important current authors - or maybe I don't - I have not read their books. I was as ignorant as any other sophomore when I was a sophomore, but in some fields I have surpassed myself. A. E. Housman says it for us:

> When first my way to fair I took
> Few pence in purse had I,
> And long I used to stand and look
> At things I could not buy.
>
> Now times are altered: If I care
> To buy a thing I can;
> The pence are here and here's the fair,
> But where's the lost young man?

Not all the changes are for the worse, of course. If I have lost some interests, I have gained others, mostly but not altogether, in the form of wants I am too lazy to satisfy. I am more interested in economics and sociology than I was, and in education. I read the business pages of the newspapers and an occasional popular volume of sociology - Reisman and Whyte at least. But I wish I knew enough about statistics to know when I am being fooled by some economists, educators, sociologists, and government reports. I know that the peace of the world is threatened, or violated, in places that are only names to me, and I wish I knew some economic geography. I would like to know what the conflicts are as well as where the places are. I know that there are flagrant injustices in Cleveland and East Lansing as well as in Mississippi, but I don't know what to do about it. I am more aware of my ignorance than I was thirty-five years ago, but I have spent my life in a university setting and have not taken full advantage of it.

Now that you have listened somewhat patiently to my autobiography, I suggest that each of you look at himself. How much have you grown since schooldays? How much have you shrunk? What interests have you lost, what new interests do you have?

Surely it is fair to generalize my experience. We all change. We neglect old interests and develop new ones. We enter into new relationships, take on new responsibilities, which require new knowledge. Every adult does this over the years. Our students come to us because they have changed and are changing. They want us to help.

These changes in people present the university continuing education agency with its first opportunity and its first obligation. The university is the institution pre-eminently qualified to help formerly - formerly, not formally - educated men and women, men and women like you and me, to achieve again the level of education and maturity which they achieved in their youth, to help them revive old interests and to develop new ones. We can take one clue from Havighurst and his notion of developmental tasks in education and learn something about our jobs by studying the new roles, relationships, and responsibilities that confront the educated adult periodically in our society - the new roles and re lationships that reawaken his desire to learn. We can learn something about changes in the individual by studying changes in society, but the student who comes to us is an individual, not a social group. Let's start with him.

(We do some awfully bad thinking in our generalizations about groups. And we make a fetish of it. I learned from an examination in Milton last month that Adam yielded to social pressure when he ate the apple. Milton says he was "fondly overcome by female charm," which seems to me a little different. We can call Eve a number of things: Adam calls her several of them. "Out of my sight, thou Serpent." "...A rib, crooked by nature." These are only a couple. But he never calls her a social group. Too many of us, I'm afraid, would be unable to plan an educational program for Eve unless we could assign her to a social group or imagine her to be one.)

But this is a digression. I began work on this paper, you will be surprised to hear, by making a list of "social changes" that I wanted to discuss. I plan to come to them. But first let me record my agreement that social changes do change people. No doubt they change groups. Certainly they change education. Sometimes for the better; sometimes not; but they do change education, which means that educators as individuals and as a group respond to them and change their practices accordingly.

I can illustrate easily. Ever since the war, throughout our rising rivalry with Russia, we have regarded our educational system as a fourth branch of the armed services, happily not yet part of the reorganization that "unified" the army and the navy into three services. What we think - what Admiral Rickover thinks - the Soviet Union is doing in education tells us what to do.

There is a nice story of a Russian and an American satellite passing one another in the firmament. In one voice, each said to the other: "Sprechen Sie Deutsch?" Nevertheless, the fact that one group of middle-aged German-trained technicians in Russia launched a satellite before another group of middle-aged German-trained technicians in the United States did is taken to prove that today's Russian education is superior to today's American education and has resulted in a wholesale re-examination of our schools. Indeed, after Sputnik everything went up. The change has been so startling that even professors of mathematics and physics have suddenly developed an interest in education after lifetimes spent in it. High schools and colleges are changing their curricula and their student advisement; colleges are changing their entrance and graduation requirements; the public generally is beginning to respect at least the scientific egghead.

This is only an illustration, and a single quick switch may not be a significant social trend. But the ground for this switch has been in preparation for a long time. During World War I, the president of The American Chemical Society called on the Secretary of War to assure him that the chemists of American were ready to help. Newton D. Baker thanked him very much and promised to let him know. In due course he sent a message telling the Chemical Society that the offer was appreciated but the War Department already had a chemist.

I need not labor the point. Social change begets educational changes and there are other influences at work than our changed military posture. The National Defense Education Act by its name and by some of its provisions may seem to regard the schools as a fourth branch of the armed forces, but those of us in the schools have other objectives besides victory in hot and cold running war. Nevertheless, this is one of the changes that has had and will continue to have a very strong influence on what universities study and therefore upon what they teach and whether they do much teaching. One change, I predict in parenthesis, is that there will be more money for education and research and that the source of that money will have a bearing on what the schools undertake to do. It is perfectly clear that the best of us can be bought; for we have been.

The rapid advance of knowledge is one of the changes that must have a direct bearing on university education of any kind and at any level - not merely in the sciences and not merely in our day. It has always been true in all disciplines and in all universities; it remains true. It is one of the reasons the individuals who are ourselves and our students need rejuvenating education. For while people have changed, the world's knowledge has changed and has changed the world.

Everyone knows how knowledge has advanced in the field he knows best. The physician knows how the art of medicine has advanced, and all of us have some inkling of it - as we demonstrate in our glib talk about "miracle drugs" and in our consumption of tranquilizers and vitamins, and as adult educators demonstrate with their sudden discovery of the field of gerontology. For that matter, we are growing old ourselves, and a few generations ago, at our age, at least at mine, most of us would have been dead.

The spectacular example of the recent advance of knowledge is in the new physics and its applications, of course: the bombs and the rockets and the satellites. While biology and chemistry and their applied art of medicine have lengthened the life-span of all of us, the applications of physics and other sciences have given us weapons that can end the lives of all of us. It is as though we were bent on carrying the observation of Malthus to its ultimate absurdity - the observation that war, pestilence, and poverty provide correctives for over-population. We may well find that the applied science of modern war will leave us no population at all.

A few years ago a college graduate returned to his Alma Mater for a reunion and called on his old professor of economics. "Perhaps you would like to see a final examination," said the professor.

The alumnus glanced through the exam and exclaimed in surprise, "But these are the same questions you asked me twenty years ago."

"No doubt they are," said the professor. "But we have changed all the answers."

Indeed we have changed the answers, for the world's knowledge has indeed changed, and who of us has kept up? As individuals, none of us surely. As an institution, only the university. And this change also gives us an opportunity and an obligation: to give laymen broader knowledge and clearer understanding and to give professionals current awareness of the state of their professions. It is another requirement that the universities work with the formerly educated, and it gives us another set of programming guides.

But we have changed all the answers not only because our knowledge has changed, but also because the world has changed. I have already commented in passing on the fact that our position of power and leadership in the world and our relationship with a comparable power in another camp has influenced our universities and us. I have touched on the explosion of knowledge and upon changes in the compositon of our population as influences on education - opportunities and obligations. I come now to comment on three more social changes that must bear on education: the extension of universal education in this country, our increasing urbanization, and the increasing mechanization and automation of our industry. Each of these changes, I think, gives us a greater obligation and a greater opportunity.

Every generation in this country has had more schooling than the preceding generation. I suggest that each of you count up how many years of schooling he has had. Now ask how many years of schooling each of your parents had? Each of your grandparents? How long was a school year? If many of us could say that our parents and grandparents accumulated as much schooling as we did, I should be surprised. How many years of schooling do you anticipate for your children?

Whether or not it is true for each of us, it is true for the country: in each generation, more people have had more schooling than in the previous generations. The trend continues. Every year a slightly higher percentage of high school graduates goes to college; each year a sharply higher percentage of college graduates goes to graduate and professional schools. And schools at every level have improving records of retention of their students.

I have spoken several times, half-facetiously, of the "formerly educated" as the appropriate students of a university program of continuing education. I am quite sure that the level of prior education of students in university programs for adults will continue to rise rapidly. As a higher and higher percentage of our population finishes high school and as higher percentages of high school graduates go to college at the normal college age, and as more of them finish college, there will be fewer late starters coming to the adult components of the universities - to evening colleges and extension divisions. I expect to live long enough to see the degree programs disappear from evening and extension divisions except for younger students for whom there is no room in on-campus day programs. But I expect to see the continuing education agencies of the universities taking on more and more advanced work for the educated layman and for the practicing professional in every area within the purview of the university, for government, for industry, for civic organizations, perhaps at some distant time even for members of the university. I expect universities to do less in recreational areas - bridge and square dancing and flytying and gourmet cookery will disappear from the extension division, I hope and believe, even before they disappear from undergraduate colleges.

For the university is a center of learning, not of cookery, dancing, and games. It is the seat of the highest education. It advances knowledge by study and disseminates it by teaching. Ideally, it should teach what it studies and study what it teaches. It is in the vanguard of the advance of knowledge, and it can have (if it is not corrupted by the enticements of restricted grants and contracts) it can have the inestimable advantage of being disinterested - which is essential to scholarship. It is the place to which educated people may turn to continue, to refresh, to revitalize their education, and it should put its main emphasis in all of its divisions on its main business. As the seat of the highest education, it should restrict its teaching to complex subjects, to important subjects, to important problems, issues, and traditions, and to students capable of study at what we have come to call "the university level." To students willing to study. I think the advancing educational level of the country will bring us so many students who will insist on our doing what we prefer to do and what we do best that we shall have neither time nor energy for anything else.

No one who works in an urban university can be totally unaware of the increasing urbanization and suburbanization of our society, but some of us do a pretty good job of ignoring it. That is to say, we all know that we have become an urban society and that the trend is continuing; but some of us do as little about it as we do about the weather: we complain and nothing else. Get off the turnpike and you will discover that we have a single city from Boston to Charleston and another from Chicago to Buffalo. At any rate, I get in a traffic jam whenever I do get off the turnpike.

The sociological and economic and political problems of urbanization are something for the university to study and to teach. The city itself is a laboratory, if you like, for the social scientist. But the city is also a congregation of people for whom the university studies and teaches. The match folders of Western Reserve University bear the slogan, "A great university is the mark of a great city," a quotation from a presidential speech. A great city is the best setting for a great university.

Not all of them, but if you will think about it, most of the great centers of learning have been cities. Athens, Rome, Alexandria, Constantinople, Paris, Bologna, Boston, Moscow, New York - and Cleveland. The great centers of learning in the future will surely be cities.

It interests me that the words civil and civility and citizen are cognate with city and that urban and urbane are cognate words. It interests me especially when I drive through city slums; but in fact civility and urbanity are urban qualities, in spite of slums. Universities have something to do with it. Many of them are city institutions; most of them send most of their graduates to the cities.

Twice that I remember John Milton proposed the establishment of academies in every population center in England. He thought they would become sources of "learning and civility everywhere." And he described a great city not only in terms of its commerce and industry but as having as many pens and heads as hammers and anvils - heads "sitting by their studious lamps, musing, searching, revolving new notions and ideas... others fast reading, trying all things, assenting to the force of reason and convincement." It is part of the university's business to see that this happens in our growing metropolitan complexes.

The university can do it, for urbanization, the congregation of larger and larger numbers of people, larger proportions of our population, in relatively close association, and particularly the concentration of educated people in our cities and their environs gives the university access to these people and gives it the opportunity to stir the ferment of ideas. The university can be central among the cultural agencies which bring learning and civility to the centers of our urban culture. No other institution can rival it for first place among our cultural influences. Urbanization presents it with another challenge and another opportunity.

Finally, there is automation and its older brother mechanization.

Automation will result, has already resulted, in some unemployment and will require retraining of the displaced for new occupations. It will give us declining percentages of the work force in unskilled and semi-skilled occupations and higher percentages in skilled, clerical, professional, and paraprofessional occupations, with all that this implies for education.

It will result in increased production per man-hour of labor, in shorter work weeks (and higher pay) for a large portion of the labor force - that is to say, in increased leisure and the means to use this leisure.

Changes of this kind have already resulted from past mechanization and automation of industry, and we have got used to them. When the change takes place gradually, members of a newer generation look for new occupations rather than following in the footsteps of their fathers. Willingness, often eagerness, to do this has been part of the pattern of upward mobility in American society. It is happening to generations now in school. Already the proportion of unskilled workers in our labor force is lower than 20 per cent. On the other hand, skilled workers, clerical workers, and professionals already constitute 42 per cent. And the change is continuing. Each generation grows up to new vocational opportunities.

But sometimes - at present, I think - change is so fast that it must affect the present generation as well as rising ones. Some people now employed on one job will end their working careers in other jobs - will have to learn new jobs or be jobless.

George Meany recognizes the long-run opportunity and the short-term danger: "Certainly," he says, "the trade union movement does not oppose technological change.... There can be no turning back to a negative or short-sighted policy of limiting progress. The answer to technological change lies in smoothing its transitions and cushioning the shocks that will attend it....

"In the longer run," he continues, "we shall press for the time-proved policy of reduction of hours. Through shortened hours, workers not only have more leisure, but we are able to 'spread the work.' We have set out sights on a thirty-hour week. By 1980 that should be easily attainable for all Americans."

In addition, of course, our young people will enter the labor force later in life and our older people will live longer after retirement from their jobs.

We have come a long way. Our child labor laws are evidence that we have earned leisure for our children and our compulsory school laws are evidence that we know what such leisure is for. We have earned time for our children to go to school and means to pay for schooling; and we have learned that it is a good thing for them to go to school.

We have earned time for ourselves to rest and time for the employments of leisure. We have to go back a long way to find the fourteen-hour day, the eighty-four hour week, normal in factory or mill. But we do not have to go back very far to find the sixty and seventy hour week. In 1870, only a life-time ago, the average work-week in the United States was 67.2 hours. In 1950 it was 42.5 hours. Thirty-five hours as a standard is now not far away, and employers as well as labor leaders talk confidently of the thirty hour week to come. The time is coming, says A. H. Raskin, Labor Editor of the New York Times, the time is coming, and coming soon, when "the week-end will be longer than the week."

Usual indexes of our wealth, as individuals and as a nation, are in terms of income and possessions. I prefer two other measures: our wealth in leisure and our provisions for education. Wassily Liontief says this for us: "If we had kept to the 67-hour week, we would be turning out a considerably greater amount of goods than we actually are. In other words, to enjoy shorter hours and longer vacations, we have deliberately chosen not to consume all the commodities and services we could be producing by 1870 working-day standards... We have chosen to spend more and more of our ever-increasing production potential on leisure..."

Many people fear, of course, that automation will result not in leisure but in unemployment. Two things could hardly be more different. "Leisure," Sir Ernest Barker says, "is the growing time of the human spirit." The dismal and despondent idleness of the unemployed provides no special opportunity for the sound growth of the human spirit. It stunts growth if it does not stop it. If automation results in unemployment, not in leisure, if we do not find ways to avert economic catastrophe like that which marked the early days of steam and the mechanization of the textile industry in Britain, we shall have thrown away our opportunities and will have no predictable future except an interregnum of chaos leading God knows where. You will find what happened well described in Das Kapital.

But if we find ways to distribute what we are learning to produce, if we find ways of sharing work and sharing leisure, we may look forward to wealth in material things and wealth in things of the spirit that can constitute a truly golden age. For it is true that "leisure is the growing time of the human spirit."

There are those who think that the progress of civilization depends on a leisure class. A distinguished German philosopher, Josef Pieper, a few years ago published a little book called Leisure the Basis of Culture. I commend it to your attention.

The great ages of Athens and Rome provided populations of wealthy freemen, rich in leisure as in possessions, and a population of slaves who gave them leisure. The feudal system of the Middle Ages and the industrial system of our time have in different ways allowed some to live without labor, at the cost of others. But men of leisure, however powerful, have always been a small minority. Now we are on the verge of a society in which, if we let ourselves survive at all, almost everyone will have leisure - leisure punctuated by interludes of work.

This is the ultimate basis for the opportunities and obligations which confront the agencies of university continuing education. The universities will have their part in the retraining programs of industry - as aides to industry, as consultants, and to some extent as trainers. But their great opportunity and their primary obligation will spring from our growing wealth of leisure.

Do not misunderstand me. I am not committing the cliche about education for leisure, which I find irritating in statements of aims of American colleges. I am not talking about education for leisure at all. I am talking about leisure for education.

For education is one of the occupations of leisure - it is no coincidence that our word school comes from skole, the Greek word for leisure. Because school - i.e., education - is the appropriate use for leisure, school in its derivation is an appropriate word for the institution.

Our leisure is relatively new, and though we have shown that we know what to do with the full-time leisure of our children, our adult population is only now learning that what is appropriate use of leisure for the young is appropriate also for their elders.

"The whole of life," Aristotle says in the Politics, "is divided into two parts, business and leisure, war and peace, and of actions some aim at what is necessary and useful, and some at what is honourable... there must be war for the sake of peace, business for the sake of leisure, things useful and necessary for the sake of what is honourable... men must be able to engage in business and go to war, but leisure and peace are better; they must do what is necessary and indeed what is useful, but what is honourable is better."

One difficulty in this country (rising in part from our Puritan heritage and in part from our equalitarian tradition) is that we think that work is good in itself and we feel guilty when we are not working. Work for us is not only useful and necessary but is in itself honourable. We think of the occupations of leisure as mere pastimes, self-indulgences. But the occupations of leisure include not only play but also worship, enjoyment of the arts, the duties of a citizen, a neighbor, and a parent, and study. It is not hard to argue, as Aristotle affirms, that these are nobler occupations than those by which at least some of us earn our bread: writing TV advertising, for example, or tending a cigarette-making machine.

There are lucky men, of course, who love their work above all other occupations, for whom it is the chief pleasure. If it is also noble work, in which health or justice or salvation or truth is the object, in which the welfare of the client takes priority over the self-interest of the practitioner, they are lucky indeed. But these lucky men, professional men, have been the exception in their passionate devotion to work and in having work to which a man may properly be passionately devoted. If they were not the exception, our unions would fight for longer hours, not for shorter ones. The labor movement knows very well that work is for the sake of leisure.

Most work, indeed, is dull, boring, almost beneath human dignity. One of the effects of the industrial revolution has been that for many men much of the pleasure has gone out of work; for craftsmanship has gone out of many occupations. Automation as Raskin describes it may relieve men of "the dirty work and all the monotonous repetitive operations that tire the body and dull the mind." Perhaps it can, but it has not done so yet. The other day I visited the highly automatized accounting and billing department of a large utility. For me, whose life has little routine in it, it was a thoroughly depressing experience to see girls run by machines, responding to the orders of machines, acting on cues from machines. To the engineer, Geoffrey Gorer observes, "the man is part of the machine, performing movements which no machine - as yet - has been devised to do." Gorer finds the fact of boredom and the fear of boredom to be outstanding characteristics of American life.

Most members of the work force, in short, must find their greatest satisfactions not in their work but in their leisure. When they learn how to do this, it will mean something more than a burgeoning entertainment industry. It will mean a society in which the majority is a leisure class that knows how to use its leisure: for worship, for study, for enjoyment, for the duties of citizenship. The relevance to the university and its agency of continuing education is so obvious I need attempt no elaboration.

Having had sophomore rhetoric, I cannot close without a peroration.

I have said that people change, that our knowledge changes, and that the world changes. All three of these changes imply changes (new opportunities and new obligations) for the university and for the universtity as an agency of continuing education.

There is one more thing to observe: people control all these changes. Men change the world. They make friends or enemies. They build slums or clear them. They create crops or dustbowls. They enslave men or they enslave machines. They build the world they live in.

Men change the world's knowledge. We may encourage its advance or we can burn the books. We can make our age the age we want. We can build the new Renaissance or the new Barbarism.

Finally, most directly of all, we can control the most important changes in ourselves. We may choose to grow or to stagnate, to live or to die, and we can help others make the choice.

In all these changes the university can play its part and cannot escape responsibility. And the agency of continuing education in the university cannot escape playing its part. My observations about the new leisure do not apply to adult educators.

Part Two

THE UNIVERSITY

University adult education not only extends the resources of the campus but also interprets the educational needs of adults to the university, sometimes in a manner that challenges one of society's most conservative institutions to move in new directions. Though evening college and extension deans seldom wield a big stick in the power structures of their universities, the growing awareness of continuing education increasingly contributes to the "dynamic tension" between conflicting demands which Dean Carlin regards as the lifeblood of the American university.

Especially in recent years, as the press of undergraduate enrollment and faculty shortages mount to crisis, discussion of how and to what extent these new demands of continuing education can be most appropriately integrated into the university grow more urgent. As they see their institutions grow to mammoth size, administrators and faculties alike fear that the university is becoming 'a gigantic juggling act' subject to external direction which jepardizes the university's central functions of conducting independent inquiry and maintaining centers of freely critical thought.

Yet most university administrators agree with the three whose essays are presented here that continuing education presents one of the most exciting frontiers in higher education. Universities are growing ever more elaborate in their functions and more skilful in managing their complexity. There is a growing differentiation of functions between institutions; no longer must every university seek distinction in the image of Oxford or Harvard or Chicago. With new forces at work throughout American higher education, new and vital forms of university adult education will be created to serve the growing educational needs of American adults while strengthening the core intellectual purposes of the university. We shall soon see some universities grow to greatness through the excellence of their continuing education programs.

These three addresses by Dean Carlin and Presidents Hamilton and Miller to the Michigan State Seminar on University Adult Education are searches for the underlying principles on which the future of university adult education can be built.

WHOSE IS THE UNIVERSITY?

Edward Carlin*

In a recent publication universities have been accused of becoming "service stations" responding as service stations are bound to do to the demands and even whims of the clientele whom they serve. This is not a new charge. Nor is the charge new, coming of course from other quarters, that the universities are failing to respond in proper fashion and degree to the wishes and desires of the larger society. We have also been told in recent years that because the faculty is unable or unwilling to do so the boards of control should mold the curriculum while from still other quarters come complaints that university administrators either are too aggressive concerning curricular matters or too ignorant or some unsuitable combination of both. Nor are the claims for powers over the universities' direction lacking from the students.

These charges and counter charges are not new but they point to the need to examine the question, "Whose is the University?"

This question may be examined on the level of the "is" or of the "ought to be". It is my impression that all too frequently it is examined on the latter level without a prior examination of the former. Even when the actual state of affairs plays a part in the analysis of the university's function and role the tendency is to exhume fragments and artifacts for the support of particular arguments and positions. Thus a certain new curriculum or course is singled out as indicative of the direction the university is moving and sweeping generalizations made that quite ignore other and possibly more important facets that are at work to move the university in quite a different direction.

I should like to attempt therefore a dispassionate analysis of what the university is in terms of those who do influence its functions. I should then like to compare the "is" as I see it with certain of the "ought to be's" that have been suggested as being more desirable. And finally, to share with you some of my tentative judgments.

For purposes of analysis we may speak of three social systems that influence the life of the university. These social systems are not necessarily mutually exclusive. They do, however, have significant differences in their relationships to the university and therefore a clearer picture of what the university "is" can be gained by setting them apart from each other before discussing how they interact. These social systems are: the public composed of a broad spectrum of individuals and groups including at one end of the continuum those who cannot name the university much less locate it or care or question what it is, and on the other those who for whatever reason, interest, propinquity, affection or dislike are in constant contact with the university. The second social system is the university community itself including not only the professors, students, administrators, housekeepers but also the larger community of scholars to which in one way or another they are all related. The third social system is the legal system of the university including the nature of its charter, its board of control and its established sources of funds and support.

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One can make the case that the university's purposes and activities should be determined by any one of these social systems. We are all familiar with the dictum that the university community itself, usually meaning the faculty, should be the final arbiters of the university's function. On the other hand legalists take great joy in pointing to the nature of the university's corporate charter with its carefully explicated delegation of powers and duties, while the larger society, the "public", reflects its proprietary interests through its frequent demands for service and assistance. One could also make the case that the university belongs to none of these groups. And certainly if by belongs we mean exclusive control, it does not.

If the university were only a legal corporation with specific functions, powers, and duties it would be indistinguishable from the research institutes or the training school. If the university were only a community of scholars and housekeepers it would be indistinguishable from the monastery. If the university were only a service agency to the general public it would be indistinguishable from the supermarket or indeed the service station.

While the university has elements in common with the research institute, with the monastery, and even with the supermarket, we all know it is none of these. While the public may exercise great influence, the university is not subject to its every whim. While the legal arrangements are of extreme importance the university is not to be described with to wits and whereases. And finally the scholars and their housekeepers do not have and have never had autonomy. What then is the situation? How is it best described?

I should like to suggest that the university exists at the nexus of a system of countervailing powers. This is a situation with which Americans are quite familiar. It is the conception behind federalism. It is also the concept behind the division of powers in the central government itself. It is a concept that eschews placing final power in a single locus. It is historical and in process.

The net result of these balancing of forces over time is to maintain a state of tension which at particular instants many individuals may find uncomfortable. It is none the less the genius of this continuing tension that change cannot only be introduced but introduced with controls. Each set of forces constitutes a modification and even at times a veto of the other. The larger public has resources to offer or withhold, the legal machinery can be invoked to thwart or compel and the academic community has knowledge and competencies that are valuable, necessary and scarce.

What I have had to say I believe applies to all universities, public and private. By way of illustration of how this balancing of forces leads to fundamental but controlled change, I should like to cite the establishment of the land grant system of higher education. All of the elements were present: public pressure, legal enablement, and the proper combination of academic dissatisfaction with extant programs and respect for their traditions. The result was a new approach to higher learning designed to meet societal aspirations within the framework of the scholarly tradition. In other words, the scholar brought his viewpoint to new areas without sacrificing his ethic of dispassionate inquiry.

Is this to say that we have the best of all possible worlds? That the university is entirely secure? That the power balances cannot be permanently shifted? It is not! A permanent shift to any pole would be a disaster. Let us examine the least likely possibility first. Suppose the academic community should by some alchemy become autonomous. No one can say what the final outcome of such a condition might be, but it is safe to bet on complacency, flabbiness, lack of vitality, and a certain leaning toward caprice. One has only to contemplate the number of "sacred cows" that currently exist in our curricula and procedures, in spite of the induced tensions of the larger society, to imagine how they might multiply if the tensions were completely removed. Or if the legal facet of the university's existence became the controlling one it is safe to assume that the modern academic mind could construct a bureaucracy that would make that of the old chinese empire appear to be a flexible instrument by comparison.

It would be disastrous if through a combination of public pressure and legal machinery the university became the uncritical instrument of the public's power. It is no accident that totalitarian governments seek immediate domination of the universities in the countries they rule. The university that has abdicated or otherwise lost its position vis-a-vis the other forces so that it can neither initiate, modify, or veto is no longer a university.

The probabilities that this could happen in America seem to be remote. The federal principle is deeply rooted, the concept that truth is best served by a confrontation of issues permeates our civil life, and the notion that power should be widely shared has motivated much of our legislation in economic areas. It could happen, however, if the universities were to relax their vigilance or attempt to ignore the pressing issues of the times. Just as the federal principle was placed in jeopardy by the civil war, or for that matter by the reasoning in the Dred Scott case.

It seems to me that the cassandras who are currently wringing their hands and crying that all is lost, the universities have become service stations, and all of that would be better advised to turn their attention to the function of the universities in their relationship with the academic community and the public to see whether or not there is a danger that the gap between what is being done and what needs to be done has become dangerously wide. The question is not so much what is taught or researched in the university as it is from what viewpoint. If the approach is particular and advocative the university is likely to be in trouble. If it is universal and disinterested it is proper. If the problem is posed in this way much of the furor over what should or should not be studied and researched falls away. The truth of the matter is that what has seemed the most frivolous of pursuits at one point in time has frequently become vital at another. The converse is also true. What is a search for knowledge without reference to its immediate or even ultimate utility can very quickly be turned into the most utilitarian inquiry. Speculation about the radiation belt intrigued a small number of scientists long before any pressing need to know its properties arose. By the same token many a practical problem frequently of the most mundane sort has triggered research that has lead to fundamental knowledge and understanding on a grand scale.

Within the university a similar division of power can be identified. The administration of the university looking out to the larger society and in to the university community has great but not unlimited power. It can and it must initiate at times and veto at others, but it can accomplish little if anything by fiat. The faculty has great power as well but it must be and usually is tempered not only by the existence of administrative power but by that of the students as well. The students too frequently are viewed by both administration and faculty as plastic homogeneous masses to be acted upon by the curriculum of the university. This is our error for in the long-run the students too exercise a veto. They pass judgment and pass these judgments on to their peers. I speak not necessarily of the occasional student revolts or of the vituperative "Letters to the Editor" but of the silent agreement to avoid or to seek out that is really much more powerful.

[Even the attempt to divide the university community into the constitutional parts of administration, faculty and students fails to tell the whole story. It is incorrect to assume that these are divisions that have separate interests or that they are at all points antagonistic or that they are internally consistent and in agreement. The genius of the university is its internal disagreements cutting through and across the lines of the administration, the faculty, and the students. Nevertheless, for purposes of analysis these groups may be identified and examined. When this is done certain common goals for each group can be recognized that in significant ways set them apart from the others. The administration, for example, is likely to be concerned with the posture that the university assumes relative to a number of other and powerful societal agencies. The faculty also is likely to relate itself to significant "others", but these are not necessarily the same ones that primarily concern the administration. The students' concern is likely to differ from each of these.

It is my contention that the very tension that such a situation creates is the life blood of the American university. Just as I should regret to see a university solely dominated either by the university community, the legal sponsors, or the public power so I would regret to see a situation where the tension among the contentions of the students, faculty, and administration had been completely resolved, for I would be convinced that one or the other force in the contention for power had won the day - and I think that would be regretable. If the time arrives when these frustrations disappear, when either the university acquiesces to every demand made upon it or the larger society comes to wait hat in hand for the university to arbitrarily pass upon its requests - then both society and the university are in serious trouble.

The university should be a place where there is tension - tension within and tension induced from without. Without the internal tension the university would lose its intellectuality; without the tension induced from the outside it could very well lose its sense of reality. Many of the changes in the course of intellectual endeavor have been generated by the intellectual curiosity of scholars, probably an equal number have been induced by needs that scholars could not recognize until others had called their attention to them.

Whose, then, is the university? It is everyone's and it is no one's! It is everyone's in the sense that all men, even if they are not aware of it, are affected by its welfare. It is no one's in the sense that a single individual or group can lay a proprietary claim to it. It belongs as much to the past as to the present and belongs even more to the future. It is a trust imposed upon all of society with those of us most intimately concerned with its internal functions having a special responsibility to understand the nature of its integrity.

The continuing health of the university is as dependent upon the balancing of the forces that converge upon it as is the federal principle itself or the division of powers within the central government. While these characteristics of self government are written into the American Constitution their maintenance depends even more on the "habitual assumptions" that guide the American citizen in his judgments of what is and is not proper political action. These same "habitual assumptions" undergird the relationships among the social systems that influence the university and the contention for power within it. This is to say that the university is as strong or as weak as the American political creed - weaken one and you weaken the other - strengthen one and you strengthen the other.

THE UNIVERSITY AND THE SOCIAL AGENCY

Paul A. Miller*

The rapidly growing number of agencies and services is one of the most pervaisive and striking phenomena of the industrializing society. The new community is an intricate network of them. Joining with those of other communities, they grow into local, regional, and national networks of specialized agencies offering specialized services. Within these networks each agency makes known both the services it offers and the needs of a community and thereby creates a clientele as well as a greater demand for its services. In short, to paraphrase a variety of writers, a growing proportion of people are making a good living by helping others make a better one. And in equally striking ways these agencies and their services seem more and more to cluster around the centers of power - such as government, business, labor, and agriculture. Social, economic, and political issues become inter-laced with agency allegiances, which, in their own turn, evoke still more allegiances. Although this scintillating network suggests a growing span of choices for individual expression, neither the choices nor the issues lying behind them are clear. This network is filled with tension, and, therefore, is itself a motivation for change. But considerable difficulty occurs in solidifying American values when they are confronted with divided commitments and halfway solutions.

This agency then must form the background against which we reflect on the university, and on higher adult education and their relationships with the larger community. We are dealing first with the interplay between the academic community and the larger community in which it rests; and, second, _I_ am dealing with a value judgment. In regard to the former, the grounds for the achievement of this interplay raise questions which are central to the development and the place of universities. The answers determine the position of a university as well as its mission. When the conditions are favorable, the mission of the university is in development. When the conditions are unfavorable, we cherish less the idea of the university than the conventions of an agency. This contrast reveals the judgment of value for my remarks. For it is my contention that those of us who represent universities in the larger community move along paths of temptation to portray the university as an agency of educational services. Indeed, I note this tendency in the planning of this program, which assigned me this topic: "Relationships of university programs with those of _other_ agencies."

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Our view of the agency in America is not one of implying its disutility. Indeed, it is the very utility of specialization which the agency connotes that suggests that the university must be something else. This distinction gives us the contribution of the university, not only to the network of agencies which are in and out of the continuing education task, but also to the society which created it.

But what are some of the distinguishing characteristics of the agency? First, it raises special need. It faces to a special range of problems or issues and, there, to a special range of people who confront such problems or issues, or those, although they may not confront them directly, who are inclined to benevolence for those who do. The agency is usually born from the presence of a developmental need, or to aid in the distribution of the rewards from development, itself. The agency discovers its legitimacy in being constituted for a particular function; and perpetuates its legitimacy by identifying a clientele and capturing a sector of their support. Therefore, the incessant strategy of the agency is in articulating its purposes with those of its clientele. A major tactic in this strategy of articulation is the volunteer leader. The successful culmination of this tactic provides the restless style of participation in the new community, the skeins which wrap individual communities into agency-stimulated associations of special interest, and their growing usefulness to the pivots of organized economic and political power. It is the vehicle of the agency in American life which has helped to merge elements of constituted authority (which the official agency, itself, may represent) with elements of influence (which the related voluntary associations of special interests may represent). It is now time to make the point: That there are few agencies which are not involved in the use of their structural position for the dissemination of information, and for stimulating processes for study and for the solution of problems; in short, knowingly or unknowingly contributing to some feature or other of continuing education.

At its heart the university is established on somewhat different grounds. For it is essential in the long history of pronouncements on the university (be they from Veblen, Newman, Whitehead, Ortega, Reisman or Houle) that the university becomes a remarkable idea, in that the nature of its usefulness is not defined by the society which created it, a responsibility which it must take on with its freedom for itself. As one of your speakers Dr. John F. A. Taylor has put it, "the civilized and civilizing risk which the society assumes in creating the university is that it is creating its own critic." While it is not supposed to become one, the Achilles heel of the university, which may transform it into an agency, is that its aims deal with the intellect and the ideas of the human experience which enrich it. Such ideas in isolation are always so amenable to perversion that the university struggles endlessly with the safeguard of omitting none, From this representation of ideas in their totality, and with an interplay between them, we discover the roots of meaning for the university as a universe or method of inquiry. While its ends are intellectual, the means of the university are moral.

But if these notions depict the heart or the center of the academic community, I must conclude that the concentric regions of university functions about this heart have blurred the meaning. The blurring effect is that more and more the society views the concentric functions as the good works of an agency. And indeed accordingly, the university as a totality of inter-related disciplines, as a universe of inquiry, has given way to a galaxy of clienteles, special functions, services which deal with the dissemination of information for particular problems, strategic considerations of competitions with others, tactics of articulation with associations, the demise of budget-making as an instrument of planning, the shift from internal aims to external claims, and the subsequent decline of an integrity of relationships within the university as an academic community. For me, the consequence of these changes is that more and more people do not know what a university is supposed to be like and for, when they attend, see, or visit one. As the feature article in the Wall Street Journal of June 8 concluded: "The university looks more and more like a gigantic juggling act between contracts, projects, consultations, conferences, and delegations of things educational to others." I am not unconsciously straying from my topic, nor giving testy complaint about the hands that feed me. I am simply attempting to conclude that the leadership of the continuing education leader is in casting the intellectual rigor of the university into the larger community; and that first before us is a re-discovering of what the university is like and what it is for.

The first relationship to others, keeping in mind the medium of continuing education, springs from example-setting, by looking to the order of our own houses and especially to the continuing education function in the life of the academic community. The continuing education leader may understate the difference between what the off-campus world needs and what the on-campus world can provide. Or he may fail to distinguish between need and want. The academic community may refuse to retreat from the orthodoxies of the professorial culture. Leaders not unlike you may treat as virtuous the problems of the people while the on-campus leaders (if there is a difference) may treat as virtuous the aims of their academic units. What both need is a forum for appropriate discourse and conversation, which is a process which joins the sensitivity in the university to the needs, the wants, and the issues of the larger community; with the distinctiveness of university resources, the tradition, and the purposes of the university; with the community's level of interest in continuing education, the nature of the issues, and the manner in which these are suggested for rigorous inquiry. If the inquiry is not rigorous, the intrusion of the university is unworthy. One major outcome of this forum is that of enlarging the understanding of the university on the part of the community and of the community on the part of the university. In relating university higher education to institutions and agencies of continuing adult education programs, our first obligation is to the quality of the relationship found in the integrity and the wholeness of the university.

Our second obligation is to be discovered, it seems to me, in the concept of rigorous inquiry itself as the means to achieving the aim of the university: the advance of the intellect. The place of execution for the university function, and even the vivaciousness of the circumstances does not alter the aim. The university, as no other human institution, is supposed to possess the universe and method of rigorous intellectual inquiry. If it does, this is what the university has to offer, more than anything else, to individual learners, communities, other institutions, and the agencies of educational services. Rigorous inquiry is an important point of assembly for professional adult education, though it may at times be critical of the perhaps necessary though more narrowly vested aims of the others. Perhaps this is why I have come to believe that continuing education programs of universities have been disproportionately devoted to rendering educational services rather than the pursuit of relevant research which must lie to the background of all education and, in addition, strengthen the methods and outcomes of adult learning. In short, and concretely, our universities have yet to fully succeed in leadership for the adult education movement, for they have been too busily engaged and content in rendering educational services with other institutions and agencies. The growing spectrum of educational services, formal and informal, which the industrial society sponsors, requires the directions and seasoning of rigorous scrutiny. This is the task of the university, and it comes in a way before its own sector of educational services is placed in the spectrum. And yet, contrasted with the active stimulation of learning experiences, I observe only casual allocations and discussions devoted to research around those shops of continuing education with which I am familiar. It is probably that a multiplicity of varied agencies and services will give the appearance of harassment. But I would wish for the university a substitution of competence of business, and a substitution of deliberateness in planning and in sharing educational models for harassment in merchandising education services. I would therefore suggest that the second contributing relationship of the universities in continuing education is the conduct of a rising tide of research in the pedagogy and the outcomes of adult learning, and then sharing the results with non-university-like agencies of continuing education.

Next there is the matter of illuminating the commonality of issues which transcends class, cultural, and provincial specificity. It is by definition that the agencies of continuing education will be devoted to fragments of issues. The university, by definition, is on another level of abstraction. It cannot evade the interrelatedness of the fragments just as it cannot evade the interrelatedness of its scholarly disciplines, nor lock in isolation its attention to the humane (the general) and the scientific (the specific) queries. The agencies of continuing education, and not infrequently but unfortunately the university, are confronted with the disorder of fragmentation involving problems and solutions. For indeed, an issue in its own right for our time is the divergence in the organization of data and in the organization of problems. While contemporary data grows specialized and decentralized, the shifts in the worlds of business, transportation, communication, and taste become centralized. This divergence makes difficult the investment of resources and techniques which are more and more fractionated, in problems which form into larger and larger combines. This calls for techniques of categorizing knowledge in an environment of specializing technical symbols. While this is the nature of the drift, even the problems themselves may be decimated by agencies which focus on bit pieces of them: a condition not unnatural and unexpected in the complex society. But it is the university, unlike the other institutions and agencies, which possesses the temperament to illuminate the issues of greater span and the vantage from which to communicate the universe of implication. The university relationship either directly with the community, or with the agencies which serve it, may provide the genesis of the issue (or the heritage of human struggle), the sense of its present impact (or its meaning to the human condition), the alternative considerations to resolve it (or an exploration in matters of value).

Among such issues of commonality, such as the relation of the individual to the industrial society and to government, there is one for which universities and their divisions of continuing education must assume considerable responsibility. This is the tendency toward disparity between technological innovation and non-technological innovation. This is an issue for the individual, the family, the community, and in national and international life. The reality of this issue, at whichever level it is found, is that non-technological innovation is scarcely ever found on a single institutional base. No longer does one find uniquely social or economic or political invention. It is more frequently an equilibrium of all these (and sometimes others like religious invention). For example, today's international relations take place in the choice-making arena of economic advantage and location, the social welfare of underdeveloped countries, and the political securities of sovereign nations. To a considerable degree we all serve as facades and reflections of such circumstances.

Not less than all the agencies of continuing education are entangled in a society which is striving to synchronize the cadence of human affairs to the cadence of technology. They must be challenged, if they represent the aims of education at all, with the issues of a people engaged in learning to live with science. Yet, may we remember that it is the university to which the agencies and institutions of continuing education must turn for the painstaking, faithfully drawn, and not infrequently courageous image of the issue. This is perhaps why I sometimes feel a shiver of apprehen sion when I encounter the specialized course for the special class which is offered in some far-off corner of the off-campus. For it is not immersed in the counter-balances of the on-campus; but, instead, at times for me, it stands starkedly and nakedly out of context. Perhaps this is why, in the interest of discharging the university function in continuing education, I have sketched out the wish that every course in the off-campus might be clothed in, and planned to suggest, the larger sense of its human implication.

A fourth obligation of the university as a distinctive partner in continuing education is perhaps best wrapped up for me in the phrase, the demonstration of continuity in self-education for excellence. It seems to me that a chief aspiration in the literature of higher adult education is that the mark of the educated person is that he is, in never-ending fashion, in process of becoming one. This notion is under-pinned with still further notions -- development, exploration, creativity, growth, and unfolding, enlargement of educational experience. But what is the batting average because continuing education facilities were available and so ordered? The nature of the university, its persistence, its truly exceptional charter to define the level and structure of its own aims, and the intimacy of its scholarly community -- all these center the advantage in the university as no other for demonstrating continuity in self-education. But we may be so persistently deterred in bringing off the demonstration! Like the agencies of continuing education, we carry the burden of sometimes endless and tiring fragmentation and almost always the burden of fitting the educational possibilities in people to campus departments. Some of us have learned how to begin but we have learned less well where to go. Others of us have grasped the deeper possibilities of the university to the continuity of self-education and are less skilled in where to begin. Some of us have an elaborate organization, but we are not always sure that the organization is functional. Others have won a place on the campus, but they are sometimes sleepless with contemplation that the place is not quite appropriate. Some of us have better learned how to dispense technology and associated skills than to sense how much people are interested in something else. Others of us have better learned a commitment to continuing education as a constant through life than how to discover the design for constancy. Some of us dare to charge into the stony battlefields for the minds of men -- and run headlong into those who see the lesser quality of tired men, immaterial books, and material interests.

Such a mixture of motivation and fatigue is a human enough reason for impatience to deploy the troops -- abandon the strategem and ride off in all directions at once. But the reasons are not good enough to erode the obligation of meticulous and qualitative care that our designs provide for continuity and constancy in self-education. It is doubtful if not axiomatic that the specializing function of the agency will play any more than a part in the architecture. It is for the university to effect the design: whether it is in initiating the precepts of lifelong education for its students, in the fellowship of its faculty and patrons, or in the thoughtful communion of citizen and community. Our fourth obligation for the university as a partner in continuing education, is, therefore, to stand firmly planted in advocacy of self-education for excellence, and to demonstrate that teachers in our day may still arrange and enlarge the circumstances by which it is initiated, pursued, and almost, but never quite, achieved.

The fifth obligation which lies in the relationship of university programs to other institutions and the agencies of continuing education is in providing the rallying point for inter-university and inter-agency cooperation. For we are today confronted with the problem of cost, the extent and the nature of the usefulness of the university, its increase in size, scope, and complexity, alterations in the structure of the population and the composition of the labor force, the interdependence of community life, and the subtle but not so anonymous regionalization of higher and continuing education. Such a penetration of change into the organization of our resources yields a catholicity of blurring effects. And among these is the emergence of the industrial-agricultural region. Simultaneously, universities with state-wide orientations confront the interplay of regional and community institutions for continuing education with their own regional communities. Extensions of the former without regard for the latter may delay the wise organization of educational resources for continuing education, and may decimate the commonality of issues in the community. This process promises also to be duplicative, costly, and unnecessarily competitive.

Although the administrative integrity of each university is assumed, such inter-university cooperation includes the identification of substantive areas, appropriate locations for field centers, their physical planning, and the conduct of their programs. Reasonable inter-university cooperation suggests the rational association of respective strengths rather than the possible dispersion of respective weaknesses. It is loyal to the people and it is attentive to the matter of cost. As we consider the deployment of continuing education resources in terms of the newer regional communities, I must exclaim that the educational resources of universities without the region should in some fashion be joined with those within. For while the regional and community institutions of higher learning are in the intimate persuasion of given communities and possess the immediacy of location, the universities of wider (if not state-wide) orientation possess a fuller universe of inquiry. That these strengths may become complimentary is an opportunity for leadership and an obligation of universities in relation to the total grid of possibilities in continuing education for adults. The prestigeful position of universities makes not only such experimentation possible, but, as well, their own distinguished contribution. For experimentation and risk-taking are among the several useful plights of the university. We must rise to this obligation in the presence of a life long succession of change which is suggesting the requirement of a lifelong continuation of education. By the fortuitous combination of intra- and inter-university resources, and accurate public image of the university idea may perhaps be more completely achieved than by inserting pieces of university resources into an already fractionated community.

No less important are the conditions of relevance for the assignment of university resources. As there occurs the multiplications of community agencies of service the question arises about the uniqueness of institutions of education. There can be no denial of placing the university in the service of the community. But the concept of service is not to be confused with the process of rendering services. The elusive quest of the university is in discovering the alchemy which transforms the initial rendering of education services into the ultimate continuity of education. This calls for continuous educational inquiry into the complexities of the human experience, which is the ultimate relevance that establishes the university and no less the community in which it rests.

And so we have skirmished with five propositions, aimed to portray in general terms a few of the obligations of the university which bind it in the partnership for continuing education. The first dealt with the order of our own university houses; the second, in sharing the treasure of the university, its method of rigoroug inquiry; the third, in courageously and faithfully depicting the commonality of issues; the fourth, in demonstrating the possibilities and the meaning of self-education for excellence; and the fifth, in assuming the organizational risk-taking for inter-university and inter-agency cooperation. But I am wise to the old shibboleth that fortunate is the speech from which lingers one lonely solitary idea. For this speech, that idea lies in the difference between the university as a universe or method of rigorous inquiry and the agency as a disseminator of educational services. "But it is not enough to profess the difference; we must act it out, nurture it, work it, apply, and defend it."

ADULT EDUCATION; TASK OF THE UNIVERSITY

Thomas H. Hamilton*

I think I should like, for the moment, to see what I could do with the argument that adult education is not a major task of the university. Let us start by arguing the obvious. This is that any university is limited in resources in relation to the possible objective which it should accomplish. So important is this problem that I am inclined to think that the major responsibility of the properly counseled university administrator is the wise allocation of resources. As knowledge becomes greater in quantity and more intricate in complexity and comprehension, its preservation, pursuit, and dissemination demands ever greater resources. A physics department, I have learned to my dismay, can in these days consume before breakfast a budget which thirty years ago would have lasted it for several years. As more and more disciplines begin to play the numbers game, counting in the head or by mechanical devices gives way to computation by electronics - a method which turns out to be inordinately expensive. Adult education is expensive too and should not, at the university level, be self-supporting. As a rule of thumb, I should say that any university administrator ought to be suspicious of an adult education program which purports to pay its own way. For when a university adult education program appears to be self supporting, one can guess that one of two things has happened, that there is involved considerable, of what we are inclined to call on this campus, "chinese bookkeeping," in which certain costs are carefully hidden, or the program under discussion is one which, for other reasons, a university should not sponsor in any event. Thus when a university agrees to take the responsibility for a program in adult education, it must do so in the clear recognition that certain other programs which it sponsors must inevitably have fewer resources allocated to it.

A second objection to the university being concerned with adult education stems from the fact that it tends to focus too much of the university's attention on the immediate, the contemporary, the applied, the practical, the public relations, in the worst sense of these words. This probably is not a very popular position to take. The term "ivory tower" is one in our society of derogation. Yet I would advance the argument that one of the major responsibilities of a university is to be relatively detached. If, as I shall admit later, the university has a positive responsibility for certain kinds of social developments, it also has the responsibility to stand off to one side and serve as the critic of society. The university, through its members, must, when knowledge and conscience compel, feel free to be unpopular. This does not mean that the university is an institution primarily devoted to the cantankerous, but simply recognizes that in our society it is one of the few institutions which, at least in its noble purpose, should not have to try to be popular. In its best sense, the faculty should not only prefer to be right than president, but so should the president. Yet the very inclusion of programs concerned with adults seems to pull the university down from this pinnacle point of observation and confuse it with an overly anxious concern for what happened today and how the techniques can be improved for the morrow.

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Finally, since universities have a responsibility always to look at the experience of the past, many universities might well recoil from participation in adult education because of the nature of certain programs which have developed in this area. Under the guise of "starting where the student is," adult education programs have brought to the campuses of the universities of the United States or to extensions of those campuses the most incredible collection of offerings as far as the university is concerned which the mind can imagine. Such programs contain offerings some of which, to be sure, are worthy of the very best that a university has to offer, but others, on review, seem to reveal only the single advantage that they keep a certain number of adults out of the pool room. Analysis of this sometimes leaves one with a sense of desolation comparable to that which occurs when contemplating the magnificent research and scientific endeavor that lies behind the modern television set only to see it culminate in the fluttering and flickering of the posteriors of American youth on the American bandstand.

This line of reasoning, and it is not entirely without foundation, could well lead one to the conclusion that whatever may be the advantages of adult education, it does not fit well into a university structure. Let the churches, the libraries, the secondary schools, the social organizations assume this function and permit universities to get on with their business. However, having now erected my strawman, I find it impossible to embrace him.

Basically the fallacies in my logic relate to two phenomenon--the rate of the growth of knowledge and the problem of relevance.

To say that our world is constantly expanding is a commonplace. It is expanding in every sense, in every field, and in every direction. Almost all the discoveries made in the last few years have resulted in pushing frontiers further away, in making origins more remote. The universe is vaster than it was thought to be, the earth more ancient, many older. . .and the world is expanding not only in time and in space: It expands every time a new idea appears, every time men acquire a new power. There is the expansion of mathematics through the inclusion of the transfinite; the expansion of the field of mind through the exploration of the unconscious; the expansion of technology through cybernetics and nuclear physics; and the expansion of every discipline through the deepening of complexity, which is indeed, as Teilhard de Chardin has put it, a sort of 'third infinite', containing abysses in no way inferior to those of greatness and smallness.

This means in essence that the university can no longer, if indeed it ever could, carry out its function by dealing only with students in residence. Since at any given moment we can teach only what we know, and some of what we now think we know certainly will in the future be established as untrue, the university is always to a degree teaching error. Correction of those errors can only take place with adults.

Similarly, new knowledge which does not necessarily refute error, but which stretches the dimension of truth must be directed not only at the full-time student but to the responsible adult as well. All of this means that the university must participate with enthusiasm in what Paul McGhee has called the "learning society" of which he says:

"Certainly we have reason to expect great things of our writers or artists, our scientists, and philosophers during the years just ahead. They will be great years. Dr. Hugh Odishaw, Executive Director of the U. S. National Committee for the IGY, compares them to the period following Columbus' discovery of America, when all European life was charged with excitement. 'This excitement and these discoveries were apprehended broadly and generally, entering into the imagery of poetry and influencing almost every aspect of life.' Similarly the Coppernican astronomy 'achieved not only a revolution in science but changed man's concepts of man, of his religion, and of his philosophy.' And now, says Dr. Odishaw, the space age 'affords a limitless frontier to the human mind and spirit.' The new horizons on earth and those beyond earth make it appear that 'another renaissance can be ours.' Ours is a restless, exciting time. Sometimes it seems to be full of Cassandras foretelling doom, but we do not have to look far to find at least a few hopeful predictions. If our time may properly be designated an age of anxiety, to use Auden's phrase of some years ago, the phrase describes a period not ending. The ice-jam is breaking up. The university's responsibility to assist in breaking up the ice-jam is great and cannot be discharged without a concern for the educational welfare of adults."

I have also suggested that the problem of relevance is here in point. As I have insisted, society needs some institutions which are detached, it does not need institutions which are irrelevant. And universities are always in at least some danger of becoming this. As Sir Eric Ashby in his remarkable little book Technology and the Academics observes, this is the fate which almost befell the British universities in the late 18th century and from which they were saved partly by the impact of the international exhibition held in Paris in 1867, partly by the German concept of Wissenschaft, and partly by non-academic adults who understood that "the industrial revolution was accomplished by hard heads and clever fingers." Commenting on British universities Ashby says:

"Even at the threshold of the nineteenth century, 113 years after the publication of Newton's Principia, institutions for higher education in Britain were still making practically no contribution to scientific thought.

"In the accomplishment of the scientific revolution British scientists played a notable and distinguished part. But British univertisites (except fortuitously and incidentally) played no part whatever. They had allowed the revolution to pass over their heads and still, a century later, they were providing no lead in scientific thought. They reflected yesterday: They did not illuminate tomorrow."

To insure, then, that universities retain this relevance I know of no better way than that they involve themselves permanently with the educational problems of certain adults. In so doing they need not lose their sense of detachment, but they will insure the continuation of their relevance.

These arguments I think are valid for all universities. I believe there is still another for the public. As I have written elsewhere:

"Too little, careful in nature and sympathetic in purpose, has been said concerning the nature of the public university. Too often, the fact has been ignored that it has distinctive features more important than the nature of its control."

All universities share a dedication to the proposition that truth and knowledge are preferable to error and ignorance and that the university must be free to preserve the wisdom of the past, discover new knowledge and disseminate both. Without this base there can be no true university of any kind.

But the public university in a free society has the additional responsibility of devising ways in which this knowledge can be utilized to improve the lot of all the citizens. The public university man must believe, in the words of St. Augustine, that 'no man has a right to lead such a life of contemplation as to forget in his ease the service due to his neighbor.'"

Having established, at least to my own satisfaction the responsibility of the university for programs in adult education, I would, however, emphasize that this responsibility is selective and not inclusive. Here I would argue that many of our leaders in adult education have done universities a disservice by demanding that they support programs for adults which are not appropriate for a university. And I use the word "appropriate" here in the sense that the functions performed in these programs do not require the kinds of competencies on which a university should pride itself. Too frequently highly trained philosophers and scientists have been asked to use their time with adults who are not prepared to make use of their talents. In their great enthusiasm some leaders of adult education have assumed that since the university has a responsibility, it has a responsibility for all kinds of programs. And this seems to me not only to be wasteful, but if carried far enough to be a factor in the deterioration of a university. Too frequently universities have taken on programs for adults which require bringing to their faculty people not educated to university quality, and sometimes such individuals have negatively affected the quality of the entire institution.

It seems to me at least that the point is that there are plenty of adult programs which are appropriate for a university to engage in without its expanding into fields more appropriate for other social institutions. I think universities have been mislead perhaps, first by using too frequently the matter of numbers as an evaluation of the success of their programs, rather than measures of the qualitative impact. I am afraid, too, that too many universities and the administration of those universities have looked upon adult education programs as good public relations devices--a gambit which seems to me always to fail, for approached from this vantage point, the university loses in the public mind its integrity and this ends up being the worse sort of public relations of all.

How does one determine the kinds of adult education programs proper for a university to undertake? I believe this is done by applying the same sorts of criteria which are applied for its students in residence when these criteria are stated in terms of principles, rather than mechanics. I would be the first to admit that the universities have not always done well with their residence programs, but this I think is no excuse for compounding the error at the adult level. What are the principles which might well be used in making judgments as to appropriateness? I should say first off that one would start by recognizing that the primary function of a university is to improve the intellectual and cultural level of the society in which it operates. Recognizing that these terms necessarily must be broadly interpreted, I would not hold that the criteria involve limiting for all time the subject matters appropriate for a university either with students in residence or adult students, for attempts to limit these have in the past failed. University faculties probably are right in at times resisting the introduction of new areas since tradition and custom are not forces which should be dealt with lightly. And yet new areas are introduced as time changes, and this seems to me to be inevitable. I think that the criteria for what should be the subject matter of a university cannot at any given time be limited by a list of subjects. It seems to me that the criteria must be stated in terms of principles and the principles probably are the product of asking certain questions: Is the area under consideration of sufficient complexity to warrant turning the resources of the university to it? Is the subject capable of theoretical and abstract formulation? And, is advancement in this area important in improving the intellectual cultural level of the society?

And finally, I would agree with two propositions advanced by Whitehead: first, the function of a university is to enable one to shed details in favor of principles. This means, as I view it, that the function of a university in both teaching and research and both for students in residence and adults is to lead students and research apprentices as rapidly as possible from the specific, the concrete and the particular; to the general, the abstract, the theoretical. And second, all of these things a university must do with imagination: "A university is imaginative or it is nothing, at least nothing useful. The tragedy of the world is that those who are imaginative have but slight experience, and those who are experienced have feeble imaginations. Fools act on imagination without knowledge, pedants act on knowledge without imagination. The task of the university is to weld together imagination and experience."

Part Three

TASKS OF THE ADULT EDUCATOR

Paul Essert once said to me that his generation of adult educators had accomplished five major tasks. "For example, we established the fact that adults can learn," he said, "and that they want to learn and will learn when given the opportunity." That we take these facts so much for granted today is a tribute to the decades of research, practice, and pursuasion which finally demonstrated them to our satisfaction. "What," he asked, "are the great tasks in adult education that you younger people are working on?" Molly Day and I and others around the table took off in every direction, verbalizing extensively and ever so earnestly about the dozens of wonders we will perform before our professional lives are over. But it was a confused, incoherent response and left us all feeling somewhat troubled.

Occasionally that conversation comes back into my mind and I find myself rehearsing what I should have said in response to that friendly challenge. I should have mentioned the revolution in educational technology in which I see the solution of many problems of higher adult education. We are developing an international perspective from which we will learn much. And when I heard Thurman White's address on the emerging curriculum, I knew at once that he was pointing the way to another of the major tasks of the next few decades: the development of sustained, deep, and meaningful continuing education programs derived from the personal and social concerns which motivate adults to learning. I re-read this speech now with the same satisfaction with which I heard it in 1962. It will lead us toward that exciting innovation of the near future -- the adult college.

Malcolm Knowles on the last day of the 1961 Michigan State Seminar, talking in his usual casual manner, shook the participants with a proposition which he elaborated later in Chapter Eight of his recent book on the history of adult education in America. We must lead the entire educational system to its proper function of preparing non-adults to be effective continuing learners. It is a simple proposition which we will labor fifty years to get established in educational practice.

These are challenges and responsibilities certainly as great as any every laid on university extension. How and in what spirit will this work be done? By adhering to the principles of administration recommended by John Friesen and, hopefully, with some of his style and breadth of vision. By listening carefully to Julius Nolte when he repeats for us "a few things he has learned." And by the devoted perseverance of the holy saints.

THE EMERGING CURRICULUM

Thurman White*

We are to consider here the problem of the emerging curriculum in higher adult education. We do not now have a continuing curriculum for adults. We do not now have an integrated curriculum. In no place in America can an adult do organized study of all his learning concerns. In no one place in America can an adult pursue one learning concern, through its many changes, during his lifetime. In no one place in America can an adult integrate his efforts to fulfill several learning concerns during any phase of maturity. The adult curriculum is incomplete, discontinuous, and uncommitted.

We may double our efforts to develop programs which feature the prospect of continuity. This includes some sequential expression but it is more than that. It is the identification of certain major themes of learning and the development of a variety of programs which are intended to satisfy a variety of concerns about each theme. There are two broad areas to which we can turn for such themes.

The first of these areas is that of individual learning concerns. Three individual concerns are associated with the context of our activities on the job, in the social scene, and in the home. A fourth, personal concerns, relates to interpretative and health aspects. At the University of Oklahoma, for example, one program focusing on individual concerns, is tied to the theme of professional development among engineers. Two professors have been analyzing engineering careers and conceptualizing a life-long program of engineering education. A second has led to the Bachelor of Liberal Studies, an adult degree which departs drastically from tradition. Its content is especially designed for adults and it uses many new methods suited to adult learning conditions.

My second major suggestion centers on the theme of social concerns. There are many critical issues before the adults of our times, which education can make more understandable, if not soluble. The proposed Oklahoma curriculum is Urban Science and the Academy of Industrial Development are illustrations of programs developed from the concern in Oklahoma and the southwest generally about urbanization and the need for industrialization in the area.

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The suggestion that we use individual concerns or social concerns as themes for developing programs of continuing education is based on the notion that such concerns are continuing, that they are dynamic, and that an individual who continues his learning around such themes will develop deeper, more meaningful, and more significant behavior. In such a way, it seems to me, we are providing the best possible kind of educational service. It is perhaps the most readily available way we have to justify our existence as higher adult educators.

The second opportunity which I see in the large and growing participation and in the amounts of money being spent in adult education programs, is the development of integrated programs of education. On the whole, efforts to integrate or coordinate the activities of various adult education agencies have not been successful. Perhaps a new approach to an integrated curriculum for adults is needed.

This leads me to think of the possibility for coordination and integration in the life of the learner and in the life of the institution. Let me first speak of the individual as the focus of an integrative effort. Modern education has learned the invaluable and indispensable role of a counseling service. I begin my thinking about a counseling program with the notion that the most characteristic and dominant thing about life is activity. The individual cannot be alive and be inactive. He cannot suppress his impulse to action. It has been useful to me to consider then the possibility of discovering what image a person holds of himself as an activity fulfilled person. It is my hunch that he comes to an educational activity in the hope that one or more of his various activity impulses may be momentarily satisfied, that he hopes somehow to increase the precision and hence the economy of effort in satisfying his activity requirements, and that while he may be anxious to satisfy the activity requirement of one kind in one program he turns to the total educational arena as a place which can help him in all of his activity requirements. In short, his desire is to be totally fulfilled and not elliptically fulfilled.

An interesting task for a counseling service would be to determine or help the person to develop an image of how he would like to function and be active in a physiological, kinesthetic, aesthetic, emotional, and intellectual way. Then one could help the individual develop an expectation for achieving his desired image through participation in a specific learning activity. This integrated approach can be associated with the thematic approach to program development. The counseling service can help the individual to fulfill his activity demands in the context of his personal or social concerns. In Tyler's terms: the activities would be the behavioral part of the learning objective and the concerns would be the content part of the objective. In Oklahoma we have talked of devising a counseling service based on such a concept; we hope to use it for developing five-year study plans for each member of our adult student body, with the fifth year added annually. The biggest barrier we see to the development of such a counseling scheme is our own administrative ineptness. We do not know how to reward a faculty member, an extension staff member, or a program sponsoring agency for the number of participants in any single program who may be transferred to or be interested in participating in a subsequent program related to a quite different activity demand or personal or social concern.

Now for the problem of an integrated institutional approach. The counseling service is the individual's guarantee that his personal integrity is uppermost in the minds of his university mentors; a cadre of curriculum specialists is society's guarantee that the institution will have an equal concern for its own integrity. The counseling service takes an appropriate action to assure the individual of help in integrating the learning available from all program sources -- those of your institution and from all other agencies in the adult education business. The cadre of curriculum specialists takes appropriate action to assure society that the institution has all of its programs related to an image of itself fulfilled. It is the mechanism for relating all programs to the truths for which the institution has pretensions. If the counseling information elicits appropriate information about various activities and interests, then announcements and recruitment for programs can follow. But the counseling procedure does not alone determine what program will be offered by the institution. This determination is made by several considerations of the individual needs totaled and added up, but is also made in terms of what somebody thinks the institution ought to do.

The approach to the problem of curriculum development by the specialists is probably the most crucial decision in the entire chain of administrative choices. A subject matter approach is deadly; a student interest approach is deadly; a canned program approach is deadly. A combination of all three -- subject matter, student interest, and previous programs -- is required. The job of the curriculum specialist is to effect the combination. And in order for him to do this without losing sight of the institutional image, a special set of working conditions is indicated. Most importantly he needs to have his office in a wing of a building where all such specialists are housed. While his responsibility is for a segment of the curriculum for a segment of the adult student body, he cannot fit smoothly into the total curriculum for the total adult student body if he works in isolation. He needs constant conversation -- both casual and formal -- with his counterparts.

Since one of the major functions of leadership is role definition, it is of primary importance that the role of each specialist be detailed by the leader of specialists, and each related to the others. In Oklahoma we have organized our program development people around the individual and social concerns rather than around the concerns of the campus departments and colleges. We have people who constantly study the learning concerns of the various segments of the adult student body.

Careful articulation of the counseling service and the cadre of specialists in curriculum development seems to offer considerable promise as a means for rapidly pushing ahead with an integrated and continuing curriculum. I doubt that you can have one without the other. Counselors who work out a five-year study plan for an individual and try to relate appropriate programs hit an appalling desert of offerings. Curriculum developers who seek for sequence and integration spawn ulcers in promoting one program at a time. Working in tandem, they can cause the emerging university curriculum to be an integrated presentation of lively truths needed by adults to successfully confront the insistent present.

STRATEGY FOR THE FUTURE

Malcolm Knowles*

Let me raise some questions about the new social imperatives for adult education. What really is the central issue of our times? What is the central issue of the nineteen-sixties? I do not really think that it is world affairs. I do not really think it is integration. I do not think that it is the adequacy of our school buildings or teacher's salaries. I do not think that these individually or together constitute the central issue of our times, they are really symptoms, not basic issues in themselves. It seems to me that the central issue is the impending obsolescence of man. The emergency of our day is that man is becoming obsolete. And he is well along on the scale of obsolescence. He is now almost obsolete. And why? Why has this happened?

Starting with the present generation of adults a new fact has been introduced into human affairs - a brand new fact that never existed before in the history of civilization. Alfred North Whitehead first pointed out in 1931 that the generation then entering adulthood was the first generation in the entire history of civilization who will experience major cultural change within a single lifetime. Always before in history the life-span of major cultural change has spread over several individual lifetimes. The new element in society is the telescoping of the time-span of revolution in culture to within less than one lifetime! And I think that if Whitehead were alive today and examining this proposition, he probably would say, "Very likely, in a single lifetime, in these days, there will be at least two cultural revolutions." In other words, the living individual will not have to adjust to only one cultural revolution but to more than one.

Now what does this mean to adult educators? What are the implications of this for the issues that we are confronting here? I see several that apply to society in general and to education in particular and to adult education specifically.

In the first place, it seems to me that the function of education in society is now different; it is made different by this fact of major cultural change in the span of one lifetime. The very purpose of education is changed.

Until this phenomenon occurred, it was sufficient for education to serve the purpose of the transmission of culture. If I am born into a society that will be essentially the same when I die as it was when I was born into it, then it is appropriate for education to transmit the culture that had developed up to the time I was born, and this would stand me in good stead for the rest of my life. Transmission of culture was a functional purpose for education up to the beginning of the twentieth century. Essentially, our educational enterprise is still keyed to this conception of the purpose of education. Now it is not true that culture will be essentially the same when I die as when I was born, but that during my lifetime it will be essentially different. It will not just be moderately different and not just different in degree, but different in kind. Therefore, it is no longer functional for education only to transmit culture. It becomes necessary then, as Margaret Mead says, for education to teach what is not known. Or to put it more operationally, the central purpose of education becomes, "to develop the ability in individuals to discover knowledge, or to conduct inquiry."

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Now, what does this mean for education? Proposition number 1 is that the purpose of education in youth no longer can be primarily to transmit culture. The purpose must now be primarily to develop the ability in individuals to conduct self-inquiry. Now what does this mean for teaching, and for the curriculum? It seems to me that it means a radical shift in the role of the teacher throughout education - childhood, youth, and adult. The teacher no longer can perform the role of the transmitter of information which has been traditionally defined as his central role. His role must now be defined as that of guide to self-learning. And this means that he engages in an entirely different order and sequence of activity from what he does if he perceives his role as transmitting information. There are some outstanding examples of the re-definition of the teacher's role beginning to appear in our schools. One of the most dramatic is the "Illinois Math" approach -- where the teacher starts not by teaching the multiplication tables, as I was taught, or how to add something, but by inducing questions in the students such as: what is a number, what are sets, what are pairs, what is order, what is beauty, and so on. The rest of the study of mathematics becomes seeking the answers to these questions which are raised in the minds of the learners.

Certainly a shift in the organization of the curriculum is also indicated. The curriculum no longer can be organized solely on the basis of the inherent requirements of subject matter. This principle of curriculum organization, which we inherited from the medieval trivium and quadrivium, was appropriate as long as the purpose of education was to transmit the knowledge of the subject matter. The new requirement is that the sequence of learning be organized on the basis of questions that arise out of the experiencing of life. And this does not mean the "life adjustment business" at all. This means exposing the learner at each stage of his growth to the issues and the conflicts and contradictions and the tensions and the changes in his society and helping him to formulate the questions that he must get answers to if he is going to be able to deal adequately with his experience.

What does this mean then in terms of criteria of excellence of youth education? What should be the test as to whether a student should be graduated from high school or college? Well, I suggest that pretty soon, our paper and pencil tests of knowledge will almost all be thrown out the window as nonfunctional. Knowledge in this scheme of things becomes a secondary thing. You get knowledge as an aid to improving your skill in inquiry. Knowledge is important but it is a means, not an end. The end of education is no longer the absorption of knowledge. The end of education is the development of ability to conduct inquiry. Knowledge becomes important only as it is a help in conducting inquiry.

So what is the test of the readiness of a person to leave formal schooling? It seems to me that there are three basic tests now that would determine whether an individual is ready to leave formal schooling. First of all, has he developed through his experience in youth education in insatiable thirst for learning - an insatiable curiosity? This, to me, is the primary test of the adequacy of the school system or college or university. "How much does he know" would not be the test. What you do not want is for people to go away feeling sated with knowledge. What you want them to do is to leave feeling just terribly dissatisfied with what they know and with what competencies they have developed in their youth, and deeply committed to a process of continuing learning.

Secondly, has he mastered the tools of inquiry - tools of learning? And what are these? Certainly, the primary one is the ability to formulate questions. The starting point and the heart of any learning experience should be, "What are the crucial questions the learner needs to inquire into in this area of learning?" The highest art of teaching, it seems to me, is helping every learner to become more skillful in formulating questions. And a test of his readiness to graduate is, "How skillful is he in asking the critical questions?" Another tool of inquiry is the ability to analyze a question to determine what information is necessary to get answers to the questions asked. In other words, does the student know how to identify required data? As I see it, this must be a generalized ability to deal with data of all kinds in order for an individual to function adequately in the modern world. In order for him to be able to identify the required data for different questions he will inquire into, he has to understand the basic methodology - the way of looking at reality - the way of examining problems -- of different disciplines, not just his own specialty. A third tool of inquiry it seems to me every youth should master before being qualified to graduate is that of reading. It is really an anachronism, that even today we are letting graduates leave our high schools and colleges able to read at less than half the speed and level of comprehension of which they are capable. We already know how to teach people to read up to 800 words a minute even by the old-fashioned word reading method. And reading is the one basic skill of further learning. So to read at least 600 or 700 or 800 words a minute ought really to go out of business. It is not providing the simple basic tool of learning. But even this criterion may now be out of date, because we now seem to be on the verge of getting a totally new conception of the reading process that results in people being able to read 20,000 words a minute. This past summer the Institute of Reading Dynamics in Washington, D. C. issued the results of a three-year experimental project in a totally new approach to reading - a gestalt approach to reading where you get the total impression of the page with great retention and comprehension.

A third test of the readiness of a youth to graduate from formal schooling should be a fairly concrete but flexible plan for continuing learning. I think that every school at whatever level has an obligation to provide resources to a student in mapping out the next steps in his sequence of learning. No college should allow a student to graduate without his having a fairly specific plan of lifelong learning. In fact, I would like to propose a reorganization of the Commencement Exercises to symbolize this. It seems to me that really, in terms of symbolism, there is nothing quite so anti-educational which a university does as put on a graduation ceremony where the university gives the student a diploma. This symbolizes anti-education -- the termination of education. My proposal is that there be an exchange on the platform at every commencement exercise. There is still to be an exercise. I am in favor of the ritual. But there should be an exchange. As the student walks up he hands the president a scroll that has mapped out his diagnosis of the areas of further development which he especially needs to work on in the next ten years, for instance, and a specific plan of continuing systematic self-development. Then the president in exchange will hand him a certificate saying that he has completed his preparation for a lifetime of learning.

Until youth education is reorganized to turn out human beings who are ready to engage in adult education, adult education has to pass through a kind of transition era in which it has to do two things at once. First of all, it has to remedy the inadequacies of traditional youth education. It has to start teaching people how to learn, because they are getting out of school without knowing. So this is a kind of temporary transitional mission that we are going to have to give a great deal more attention to. This means now that we are going to have to reorganize our curriculum to teach people how to learn. We are only teaching them the things that they learned as children which is not "how to learn;" it is "how to absorb knowledge." So we are going to have to teach them how to learn. We are going to have to teach our teachers how to teach people how to learn! And this means essentially, it seems to me, that every unit of adult learning must be organized according to the spirit of conducting an inquiry. And this means that every learning unit starts with a question. And if I had my way, every catalog that comes out of every adult education institution would have not a course title but a course question. I think that there is no excuse for any kind of learning not to result in an added increment in the ability of the student to conduct inquiry.

So, adult education would make up the deficiencies of youth education by teaching adults how to learn. Then it seems to me adult education can graduate into a true role in society by developing a curriculum that will provide for efficient lifelong learning by adults who are able to engage in inquiry. Now what does this mean? It means that we as adult educators have a problem of reorganizing knowledge. It seems to me, that once we get a population who are no longer in imminent danger of obsolescence, in that they have learned how to learn, they will need help in knowing what to learn. We know pretty well how to help people keep learning in their specialist roles. We have not any idea yet how to prevent people from becoming obsolete as generalists, as human beings. This is not going to be answered, I think, by any pat formula of liberal arts education or packaged programs. It is going to require that we identify the essential elements of added increments of knowledge in every one of the core areas of knowledge which impinge on life. What I am saying is that every discipline then will have to have a dual function in regard to mankind. One is the continual growth of its specialty; the other is extracting out added ingredients which every individual needs to have.

My feeling is that adult education is really on the threshold of becoming the largest and most important part of our total educational system; that, in fact, it does not make sense in an age in which the time span of cultural revolution is less than a lifetime, for childhood and youth education to be anything but preparation for adult learning. The function of youth education will be primarily the development of the tools of learning -- the ability to learn. We are now talking about a basically different concept of the meaning of continuing education. Continuing education can no longer be perceived as starting when formal schooling ends. Continuing education starts with birth and goes on right through life. So the role of adult educator now becomes that of professional leader of the total field of education. Adult educators cannot abrogate responsibility, it seems to me, to provide statesmanlike leadership in reconstructing our total national educational enterprise to meet the requirements of the space age.

Society now has a stake in the education of adults every bit as great as it ever had in the education of children. Society cannot continue with adults becoming obsolete. It has to prevent humanity from becoming obsolete. It has no choice.

FINDING NEW STRATEGIES AND NEW APPROACHES

Julius Nolte*

The word "strategies" implies broad planning of a campaign; but it is also loosely used as a synonym for "strategems," which connotes a series of fooling devices or lures to achieve an alleged or apparent desirable result. This discussion is in the context of the first or more literal meaning, but the word "approaches" in the subject assigned to me may suggest some attention to the second meaning, and I shall try to do something about that, too.

By way of introduction, I would like to state a few propositions that I think relevant to our inquiry.

The first is that the people of the United States believe fundamentally in equality of educational opportunity. However much we may have changed our definition of "education," and however much we have through the years differed as to the nature and quantity of it, the idea that society should somehow provide it has from early colonial times been part of our philosophy. This belief was part of what Oliver W. Holmes, the elder, had in mind when he said that in the U. S., "The axis of the earth sticks up visibly through every town and village."

Equality of educational opportunity, as you know, was the head of the corner of Jefferson's idea of the structure of American society. We have never gone all the way with Jefferson's proposal that such opportunity should be publicly financed for the qualified during satisfactory academic performance, or that the opportunity should include quite such an ample and various bill of fare as he set up as the desirable intellectual menu for the public university. But in the United States we have continually widened the scope of such opportunity at its "lower" levels; and our unparalleled "affluence" as a federation has led to a "democratic" idealism which has supported many more than the relatively small group of best academic performers through elementary and secondary schools at public expense. Our wealthy society has also provided by both public and private means support on a selective basis for some of our youth through part or all of university courses leading to baccalaureate and even advanced degrees. We have out-Jeffersoned Jefferson as to the "lower" kinds of education, and have under-Jeffersoned Jefferson as to higher education. But it is probable that the very ease of acquiring the wealth which made popular education possible and our security as a nation blinded us to the necessity of giving serious and unremitting attention to higher education. At heart America, I believe, supports the Jeffersonian idea of equality of educational opportunity.

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The second proposition I should like to state is that if we are wise, the present crescendo of crisis afflicting us cannot fail to accelerate our devotion to equality of educational opportunity and our efforts to provide facilities for making it a reality. It was at first appropriate for us to speak always under a precariously mounted sword of Damocles, but in these later days of this cold war and with the demonstrations of the force of nuclear weaponry we need a new and infinitely more horrible figure of speech to describe our plight. There is much evidence, as you all are aware, that we are wise enough (at last) to understand our plight; and we have begun, some think a little hysterically, to try to make up for lost time and probably misdirection. The times are urgent, and our expenditures for education, much more of them financed by the U. S. government, are rapidly rising.

My third proposition is that the urgency of the times, by which term I mean to embrace not only the dangers of imminent warfare and the challenge of space, but also other factors such as population pressures of all kinds, automation, mobility of productive facilities, industrial combination and supersession, declining purchasing power of money, the increased survival rate of our people, and so on. This urgency of our times emphasizes adult education as it never before has been emphasized in our country, and loudly proclaims the need for it. This need is outlined in its multiple forms both in the recent position paper of the Division of General Extension of the Land Grant and State Universities Association and in the policy statement of National University Extension Association. These statements have been widely accepted as summarizing accurately and comprehensively the whole duty of public higher educational institutions as to adult education, and most of which I wish to discuss is really by way of commentary on this third proposition of mine and its corollaries.

One would think that the development of adult education facilities in our public colleges and universities, covering as it has half a century with its wars, depressions, and periods of expansion and change, would almost automatically be taken as the approved agency or means of further service to our society. The extension divisions of our public universities have indeed been expanded and their duties multiplied. However, it seems to many observers, including myself, that our very affluence in the United States, coupled with the fiscal harassment of our higher education institutions in the face of expanding curricula and the enrollment bulge, has led university administrators in many instances to absorb into what might be called "regular" activities, activities which hitherto were in the province of Extension. Indeed, Extension was created to take care of them. One result of this change of stance on the part of universities has been to lessen the morale of extension faculties and workers by forcing on them the spectacle of adult education operation. It has been indifferently conducted by personnel untrained for them, carried on on a financial basis indulgently magnified because of what seems to be a sort of political use of national necessity, and has involved much waste.

The Sputnik incident and what has followed it, for example, led to almost hysterical largesses from government for educational programs related to security and thus in the realm of the scientific and technological. This outburst of newly discovered hunger for scientific excellence led to a well-provided table for many university departments. But it also led to a similar hunger for so-called "liberal education" programs, lest our education become unbalanced; and in short time a well-provided table was spread for many other university departments. All programs of this emergency genre have considerable portions applicable to adult education; and under the customary practices of former days universities would have turned to extension to administer them. Nowadays, however, they are likely to be in many instances administered by special committees or administrative bureaus specially created for the purpose; and this likelihood increases in direct proportion to the amount of special appropriation involved.

In other words, university administrators who actually shared in the planning of Extension and formerly praised it, changed position when money from the U. S. government and foundations became available; and they have recently sought to expand adult education outside of their Extension Divisions, (except as to Cooperative Extension) in a few cases even diminishing the chief support of Extension by absorbing "credit" operations of the latter into other (subject matter) departments. After earnestly preaching for half a century the gospel now mouthed by all educators on many campuses, Extension finds itself at its moment of greatest opportunity browbeaten, to some extent degraded, and often forced to perform non-collegiate or at least non-academic or non-instructional functions. The result of this is bound to be insecurity and dismay.

It is quite possible that the money-engendered hypocrisy of administrative heads is not the only cause of the disappointing failure of universities to use competently and to the fullest extent their Extension Divisions. However, I should like to say that the dismal phenomenon I have just indicated is not ubiquitous, and is so far the beginning of what may be indeed a trend for better performance on our part. Certainly this is a good occasion for us to examine our own practices and to adapt what we can devise out of such examination to bettering our services.

What strategies are appropriate to our efforts to assume our place in the sun? One, I think, is the use of the American Association of Land-Grant Colleges and State Universities[1] report, the Tyler report[2] (when it is published) and the NUEA policy statement.[3] These documents are thoughtful and to an extent profound. They are more moving, I am sure, than most of our usual publicity output, which is often little more than "The patter of little feats," as the man says. These documents should be judiciously placed before persons literate enough to read them objectively, persons of influence but of all stations in life -- those who really form what we call public opinion.

Our own institutional publicity, moreover, in addition to its necessary burden of information about what we do should carry the weighty message of the general brochures I have mentioned. This latter weight it has to bear rather lightly, I expect; but it should carry it nevertheless, so that he who runs may read.

Another strategic move is that which has been underway for many years, and which, it we had been able to bring it to fruition before Sputnik, could have brought to Extension its rightful stature in our universities. I refer to the General Extension Bill, first introduced in 1940, and an intermittent tenant of the halls of Congress every since. If ever there has been a case of a needed and valuable aid to education, consistently devised, this bill is it. It has had no real opposition, only too much indifference from those who should support it. The tidal wave of suggested educational expenditures now flowing out of the pork-barrel enthusiasms of educators and congressmen has brought, so it seems, nothing but a derisive attitude towards the General Extension Bill, which is sane and modest and has been forged out of a quarter-century of successful practical experience. Beside the big omnibus bills, our bill is not even a respectable tip for the waiter, yet it is a response to today's urgencies much more realistic than the bulk of the proposals now being proposed. The latter are often meritorious, but in any priority system of desirabilities for today's conditions they rank below the General Extension Bill. All of us should be prepared to do what is

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1. Charles P. McCurdy, Jr., ed., Proceedings of the American Association of Land-Grant Colleges and State Universities: 75th Annual Convention, Vol. II, American Association of Land-Grant Colleges and State Universities, 1962.

2. Ralph W. Tyler, "An Evaluation of General Extension Work by Land-Grant Institutions," American Association of Land-Grant Colleges and State Universities, 1961.

3. H. R. Neville, et. al., "Report of the Policy Statement Committee of the National University Extension Association: Fall 1961," National University Extension Association, 1961.

suggested to us by the legislative committees of the associations to which our institutions belong to try to pass this legislation.

Sometimes I think one of our number, one of our prominent leaders in Extension, ought to be a martyr in a loud and perhaps vituperative voice calling attention to the derelictions of our public universities in their management of adult education. Almost without exception the presidents of these institutions have blessed and exalted such education from the rostrum and in meetings of citizens. And with very few exceptions they have not even whispered words of favor and support in the budget sessions, either on campus or in legislative halls. And I have heard no university head calling to the attention of his public the fact that they, the public, have paid for the benefits of adult education, over and above taxes, out of their own pockets and at a rate uniformly much higher than "regularly" enrolled day-school college students. Nor have I heard any university head explain publicly that sometimes such administrators unblushingly overload the fees charged Extension registrants and take the surplus for other enterprises having nothing directly to do with adult education, let alone the activities for which the adult payer of fees is being assessed. The position of Extension in the university pattern will not be made reasonable and secure until the financing of it is made reasonable and secure. Perhaps someone must play St. John and cry out in the Wilderness. Ralph Tyler came close to it in Kansas City. But as an outsider (in a way) he could only be the precursor of a prophet or a martyr. Even if we do not wish to volunteer for martyrdom, we can at least join in with the refrain of Ralph Tyler's lugubrious solo and cry aloud our distress. All of us should join in.

So much for general strategies. We have discussed briefly the use of published brochures emerging from our associations and other materials published by our own institutions. And I have mentioned the General Extension Bill, and our own outcries about the injustice of our present position. It remains now to discuss specific strategies designed to improve our present practices. This is no doubt an extremely important field, not only because of the intramural divisive trends already mentioned but also because of the fact that adult education is as yet in many respects chaotic and disorganized, and prey to all sorts of experimenters outside of universities as well as on campus. Social sciences seem to go through such a phase of confusion. William G. Sumner once described sociology in its period of formation. He said, "Any crank can fasten on it from any angle." Wherever you come from, look around you. Your area is crowded with adult education activities -- some good, some indifferent, and some both bad and extravagantly costly. If we, as University Extension, are to survive conscientiously, we must stay in the class of the good.

How do we do it? You know as well as I. All anyone can do to help any of us is to repeat a few things he has learned. Even then what he may set store by may not work for the other fellow. But let me mention a thing or two.

I do not know whether we are still in the "strategies" category, or whether we are now with "strategems" or "approaches" but one idea that I think valuable has been impressed upon me again and again. The U.S.D.A. several years ago made an extensive examination of responses by farm families to a campaign trying to make them change position as to a regular practice on the farm. The researchers tabulated the responses resulting from a number of varities of impact. The curve of varieties of impact almost exactly paralleled the curve of responses. The sample was statistically valid in number and representative quality. This is a lesson of great value to us, I think, and one we ought to have sense enough to put to use. Yet we are just beginning to try to do so, and mainly under prodding from outside by suggestion or example.

Another thing I seem to have learned is that one should not operate with inferior personnel. It is hard to foreclose an opportunity to serve when you cannot do justice to your prospective clients; but in the long-run you cannot do otherwise and keep your self-respect as an institution. But in addition to selecting qualified personnel in a subject-matter sense, one must pay unusual attention to the skills of communication. Most university faculties, for example, have "big-name" professors who are almost wizards in their field but often not effective in the vocabulary of the ignorant. If the group to be served is in the latter class, perhaps a more articulate professor will teach them better. The greater the difference between the subject-knowledge of teacher and student, the more one needs to insist on teaching skill in the instructor. This hypothesis deserves emphasis now, when many of us are finding it difficult to find staff for our activities.

It is good sense, too, I think, to have a look at new devices. Often we establish ways of serving only to find after a while that although they seem to work well enough some other plan would work better. Flexibility should be built-in in our Extension departments. But this is one of the hardest things to accomplish in an atmosphere dominated by the line-budget-minded boys in the comptroller's office.

Back before World War II it occurred to me that state universities were not doing much with and for voluntary associations. It seemed to me that such associations, which have always been important in American social and political life, contained enough on a state-wide basis of truly pro bono publico organizations to justify some help from the universities. We started to form a secretariat for such associations, but the war intervened, and we could not get started until 1950, with four members at first. There are now over forty members, and I am sure this department -- the State Organization Service -- is of great value to adult education in general as well as to the associations belonging to it. We do not try to influence their programs (except by helping them to run them better), but we run a pool of services which saves them money. Inasmuch as they are all pro bono publico and non-profit, their costs are paid by the public anyway and it is pretty much a question of out of which pocket. But our department saves these groups time as well as money by liberating members and officers from routine office work. I believe several of our state universities would find such a department very useful.

In addition to new devices of the kind just described, we ought to be continually re-examining our list of activities to see whether we are neglecting somebody or failing to make our offerings of whatever nature specific enough to meet revealed needs. At the Land Grant meeting in 1954 I heard a speech on the status of women by Dean Althea Heittel of the U. of Pennsylvania, at that time chairman or director of the ACE Committee or Commission on the Education of Women. The speech impressed me tremendously, I think because Dean Heittel's words and her method of delivery made so clear the frustrations almost inevitably facing a large number of women. When I got home, I sent her talk around to the women on my staff, and then at staff meetings we decided to do something about it. What we did was to dump the problem in the lap of Mrs. Elizabeth Cless, my assistant for liberal education programs. It took her a year or two to formulate a plan, and we started, with results so interesting that we widened the plan (the Minnesota plan for women's education) to include undergraduates (so as to prepare them for their future involvement as adults and thus make education continuous) and eventually got a grant from Carnegie to help with experimental ventures ancillary to the original idea. We have almost literally been overwhelmed by the results. This is an area or field or realm in which all of us should be interested. I dislike this how-we-do-at-Siwash approach; but this adventure with the ladies (some of them call themselves "rusty ladies") has been fascinating and rewarding. It is exciting to both staff and students to find out what lies beneath the rust.

All that I have said, I hope, emphasizes the sovereign fact that if the aspirations of Extension Divisions are to be realized, those conducting them must be educational entrepreneurs, as indeed they were set up to be when the early great divisions were formed. To make of Extension staff members here servants of an enterprise called dimly "field services" or something of the kind is by the very nomenclature to create what is essentially a false image.

TO THESE TASKS

John K. Friesen*

In this fantastic age of science, C. P. Snow keeps reminding the world that the idea of two competing cultures is the most challenging task before us. Another intellectual giant, J. Bronowski, soon to leave Britain for La Jolla as a fellow in the Salk Institute for Biological Studies, continues the debate which he introduced eight years ago in his book, Science and Human Values. I refer to his lengthy provocative article in last month's Nation, "The Abacus and the Rose - A Dialogue After Galileo". He emphasizes that we should, like the Greeks, see the whole of intellectual life and not divide it into little pieces. "Marlowe didn't spend his time with literary critics; he spent it with mariners and scientists and adventurers. Galileo's father was a musician but he did not sneer at his son for taking up science." In short, in a world of confused alarms and in a chaos of shooting stars, Bronowski's scientist is pleading for a universal unity, viewing the search for truth as "not a string of mysteries but a string of molecules . . . the way Isaac Newton is changed and still preserved in Albert Einstein." But Bronowski's humanist sees science as simply a neatly joined construction and asks: "Is this supposed to compare with the wealth of Shakespeare and the warmth of Lawrence?" The scientist replies that it is not the intricacy of nature that moves him but "the simplicity of its means that overwhelms him with a sense of awe . . . the unity under the surface chaos. This is the scientist's definition of beauty, and it makes nature beautiful to him all his life."

Some time ago our University invited a former Canadian geneticist, now at one of your universities, to spend a summer term on our campus. This man is struggling with the same conflict of values that agitate Bronowski, Snow, and others. At a luncheon with him he explored the fascinating world of biology and summed it up in these words: "The great debate really rests on but two areas of research which higher education will find the most productive over the next century: the first is biology or how life happens and grows; the second is humanity, or how this life is to be lived in harmony. All the rest is commentary."

Related to these concerns is a recent tragic event that startled not only your late President's countrymen but virtually all nations into an awareness of unexpected danger, and created a sense of sudden unity at their grievous loss. For some years now, whenever

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I read of such events, Scott Buchanan's reference comes at once to mind -- words of profound legal and philosophical insight:

> "Below the holdup man is the beast; beyond the martyrs are the gods. Political life moves between these levels. . . The body politic is not easily sold out. At any political table there sits a third party - the reasonable community. Out of this comes contract."

This observation applies to our nations and to other peoples, and hopefully to a community of nations.

Some of these stirring questions have faced other cultures but never with the desperate urgency of ours. Intelligent society is looking for higher education to reveal and say something useful about these matters for their enlightenment or solution. It asks this of higher education because every man is today instantly involved in everything that happens everywhere. Technology and particularly the mass media have added powerful impetus to this total involvement. Events make the prospect at the same time promising and frightening.

While grappling with ideas central to higher education, the University is also faced with complex internal policies. Having established the goal of social democracy -- and this still is perhaps the greatest long-term contribution of your nation to the world's people -- the University today asks itself again how it can best serve its youth and its adult population.

For certain levels of education, universities are realist enough to keep their eye on standards, to see the need to counsel those who are not adequately equipped, and to seek further education in other institutions. This is only common sense; public and private agencies have already created a host of opportunities for continuing education. Widening the continuum for education in no way lessens the university's responsibility; the result for us will be increased provision guided by more careful selection and refinement. We will long ponder the wealth of information revealed in the study in adult education by the National Opinion Research Center.

Now what of the university's changing responsibility toward the education of adults? In the first place, university administrators need to remind themselves that the regular or day student is a junior member of the adult community who is only a few years away from the professional and civic ranks. If education is to be "a string of molecules", the university is directly concerned with educating adults the moment any and all students register, whether they are 18, 28, 38 or 48 years of age. All are potential or actual leaders in society for we know that in our specialized world, the commanding positions in virtually every major walk of life must of necessity be occupied by university graduates, including Extension alumni.

Having wandered widely thus far, let me now narrow the focus on the university administrator, the person who manages or conducts the educational enterprise. Surely his grand design is first and foremost to help produce educated men and women who know, as Sir Richard Livingstone observed, what is first rate in as many fields of life as possible. This I would consider to be the motto writ large over the administrator's office door. Ways and means are his technical concerns but in my opinion his central purpose is to bring together a good and preferably a great teacher with a potential learner. An administrator who brings it off successfully is worth his salt. As servant of both university and society, he can visualize his alumnus years hence, saying with Matthew Arnold:

> "For vigorous teachers seized my youth
> And purged its faith, and trimm'd its fire,
> Show'd me the high, white star of truth,
> There bade me gaze, and there aspire.
> Even now their whispers pierce the gloom:
> 'What does thou in this living tomb?'"

If the administrator is also a teacher or knows teachers well, he will have observed how teaching can be an exciting way of learning. By way of illustration, Jerome S. Bruner, in his popular summary of the Woods Hole Conference on Education, tells of a distinguished teacher who was instructing his advanced class on the quantum theory: "I went through it once and looked up only to find the class full of blank faces - they had obviously not understood. I went through it a second time and they still did not understand it. And so I went through it a third time, and that time I understood it."

The one thing a university administrator must bring to his task is an appreciation of "universitas" - the all-news or wholeness of knowledge. When he realizes that mathematics and chemistry are related to literature and political science, and in fact that all disciplines are related to infinities, he can then begin to see emerging a pattern of resources for the continuing education of adults. Moreover, as computers will increasingly supply him with information, he will be called on to form judgments based on their results and more particularly on values. What comprehension has he of the total image? What is his Weltanschauung? The daily tasks before him will require an ability to think intuitively. I mention intuitive thinking because, as Jerome Bruner wisely points out, this is a "most valuable coin of the thinker at work, whatever his line of work". Persons without a perspective of totality will not profitably indulge in "the courageous leap to a tentative conclusion." Obviously hunches are followed by testing and verification.

For the administrator the scope includes a knowledge of the main problems which the University Board and executive offices face with reference to students, staff, finance, and planning. The Extension administrator has constantly to keep this frame of reference in mind in planning the also complex pattern presented by continuing education. Both his credit and non-credit programs must be seen in relation to needs of people who are already in the mainstream of community life. The ability to see the whole task and to program accordingly is a herculean assignment, and the administrator's reputation and success will be gauged by his performance in it. Howard Neville properly stressed this factor in his address at the Sagamore Center in June 1961 when he spoke of the administrator as an "educator-administrator".

This brings me to what is in all our institutions an on-going debate and one that will not be easily resolved. It is the seeming conflict between the academician and the administrator. The traditional universities - Bologna, Oxford, Harvard - were spared this problem. Today, with the rise of the large, specialized, complex university, the dual academic-administrative role can create sharp differences. Is the competent professor ipso facto the ideal administrator or does administration require at least some or even considerable preparation? In such cases as accounting or plant management, the answer may be simpler; for most of the university's administrators, however, the matter is much more involved. The extension administrator, for example, must have a general understanding of the entire institution, and he needs to be identified with and command the respect of colleagues in his own discipline.

We recognize of course that administration exists as the servant of the university's central purpose, the academic community. The administrator is its facilitator. J. A. McIntyre's comparative analysis of the two roles (Bulletin of the Canadian Association of University Teachers, December 1963) concludes that a "recognition of the existence and importance of these two social structures will mark the willingness to develop patterns of action, decision making and authority embracing and embodying this duality. Much of the future administrative work of the University will have to be done by career administrators, not 'promoted academics', if any semblance of success is to be achieved in getting the necessary academic staff to meet the rising number of students about which forecasts warn us. The academic would view this with equanimity rather than alarm if the ultimate decision-making and authority in the University reflected a recognition of the dual social structures and the primacy of the academic function."

Another valuable research finding, that keeps reminding us of the same need to resolve the frequent academic-administrative quandary, is that of Donald R. McNeil whose joint study on

University Extension, under the chairmanship of Wisconsin's President Harrington, we are eagerly waiting to read. McNeil keeps stressing the need for much closer kinship between Extension and the larger university family if our activity is to win the respect of all parts of the University and if adult education is to be integrated with all functions of higher education.

At this point you may well ask what are my set of principles for administration. I have dwelt on a few of these. We will see more of theoretic and applied research in this field. I would draw your attention to a paper read at this Center by Paul Essert and addressed to the professors of Adult Education in 1960. Another useful item is the report titled Administrative Theory in Education, edited by Andrew Halpin and published by the University Council for University Administration and Chicago's Mid-West Administration Center in 1958. The contributors include Talcott Parsons, Jacob Getzels, Daniel Griffiths and others. The titles suggest the scope of administration from problem solving to decision making, to administration as a social process. Paul Essert sees the administrator with reference to organization, the individual, and, what he terms, regard for prudence and foresight. There is much sense in his summary as to what the administrator either possesses or else should acquire in building a democratic social structure into all his relations. The bureaucratic administrator, coming new to the university, may have a rude awakening if he is not aware that he is now in the environment of a social institution in which administration is or should be essentially a process where the individual is consulted and coopted.

It bears repeating that the function of the administrator is to develop and conduct a program of studies with imagination and, I need not add, with a steady eye to financial resourcefulness. A very successful young adult educator of my acquaintance attributed success to this formula: "He who has only a vision is a dreamer, and he who has only a program is a drudge; but he who has both vision and program is a conqueror." The pioneer Extension administrator was usually an evangelist and generally something of a "character" - a frontiersman blazing unmarked trails for university and community. Today he has also to be an efficient executive who must know where he is going, who realizes that public and private funds are keenly competed for, and who has a realistic appreciation of the university's needs and that includes adult education. He is aware that the university and the nation are drawing blueprints for higher education as comprehensive as they are able to discern the requirements.

A few remarks now on future trends in programming the Extension program will reveal a marked shift toward assuming responsibility for the graduate's continuing education from the day he leaves his alma mater. Some professional organizations and industries are already thinking ahead of university administrators in prescribing continuing education as a requirement for membership or employment. This area of continuing professional education, we know so well, is one which the community and legislatures and indeed at times even universities understand best and prize most.

Over the next generation or two, the individual should and may well become more interested in "saving his soul" than in only satisfying his physical well-being. Liberal education, which the student has only tasted in his undergraduate years, will loom large for the majority in later years - at a time when he can profit most from it. However, if our present performance today is a reflection of the future, we have reason to be concerned. We in University Extension are merchandizing academic wares, and in the area of the liberating studies our experience and our judgment often lack choice, depth, and continuity. The economic motivation in breadwinning and politically profitable programs is too strong to match the support for the liberal arts. In recent years had it not been for the superb consultative and research services of the Center for the Liberal Education for Adults, where would many an institution be in making the case for these offerings, and in launching out in new directions! We need to strengthen our Center and to bolster research efforts elsewhere and perhaps establish at least modest counterparts in our universities and in other research institutions.

I would be remiss if I did not mention the new tools of learning at our service which cater both to specific groups and to a larger public. I refer to the mass media and to what have come to be known as a variety of teaching machines. Your country has long been in the vanguard of educational television. Even in places where radio and television are public domain, the job of adult education is not done as well as it is through your educational stations, for in most countries the media are usually called upon to serve all publics. Many of your universities have also put radio to excellent use in further education. FM radio, often commercially operated, has already demonstrated that it too can play a prominent role in higher adult education. University Extension is challenged to employ these immensely useful aids for experiment and use, or else to relegate this role, for better or for worse, to other agencies.

I have extolled the administrator who, as an efficient executive, remains an adventurer in programming, in decision-making, and in research. Of course he sees the dangers as he remembers the adages of youth, "Look before you leap", and at the same time "He who hesitates is lost." Hopefully Mark Twain's advice wins out when the humorist urged him to "Climb out on a limb, that's where the fruit is." Having the respect and the confidence of the university community, the administrator can more boldly break new ground for he realizes that continuing education is ever venturesome, and indeed is in a unique position to contribute useful experimentation and research to the university as a whole.

Finally I associate myself with that stout company who believe that a climate of hope and realistic optimism pervades the future of university adult education. On this quadricentennial of his birth the familiar words of the great bard of Avon are timely too for our task:

> There is a tide in the affairs of men,
> Which, taken at the flood, leads on to fortune;
> Omitted, all the voyage of their life
> Is bound in shallows and in miseries.

We are witnessing a wave of public interest for continuing education as never before. Men of wisdom in high places are now raising their voices in urgently supporting it. No one has expressed it more effectively than the Carnegie Foundation's President, John W. Gardner. In his brilliant essay, "Renewal in Societies and Men", he extols the society that provides for built-in methods of renewal, a society where the self-renewing man embarks on a voyage of discovery that never ends.

It is also our good fortune that we can best further this task in the truly privileged environment of the campus, indeed of a much vaster campus. In a very real sense universities know no borders for they are an international community of intellectual kinship. My heart bounds at this thought, for in our field of endeavor there is much to share -- and even more to learn.

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